THE MARINE RECORD

ESTABLISHED 1878

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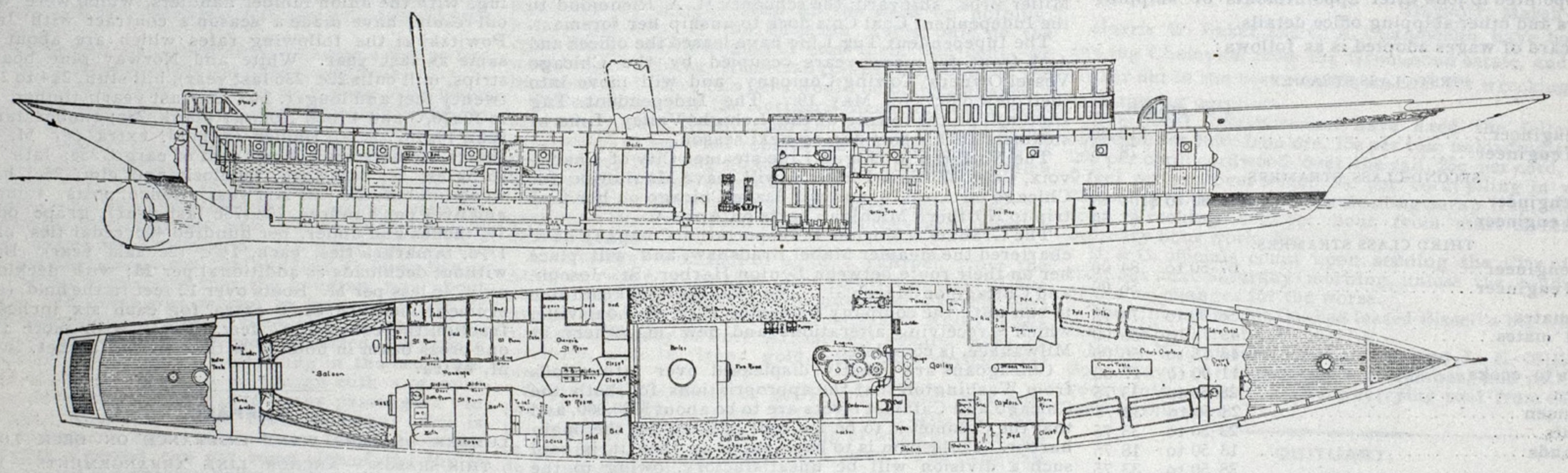
THE NEW STEAM YACHT KANAWHA.

The works of Charles L. Seabury & Co., at Nyack, N. Y., are building a large steam yacht to be called the Kanawha, for John P. Duncan, of New York, and a member of the New York Yacht Club. The Kanawha is of composite construction, 140 feet over all, 114 feet on l. w. l., 17 feet beam, 9 feet 8 inches deep and 7 feet daught. The frames, keelsons, breast-hooks, deck beams, diagonal straps and fore-and-aft plates are of steel, as are the four watertight bulkheads, while the steel coal bunkers are stiffened and braced with angle iron. The Kanawha will be flush decked and schooner rigged. She will have a deck house of mahogany, handsomely paneled. This house will be used as a dining hall, and the after portion arranged as a buffet. Aft of the deckhouse and connecting with it will be a large pantry, fitted with sink, shelves and all conveniences, and this will also be finished in mahogany. The top of the deckhouse will be covered with canvas and a grating will be fitted on top to extend back to the settees at the after end. There will be a double brass rail fitted around the top of the house and the bridge. All the windows will be of plate glass. Chain lockers are fitted in the fore hold. Aft of these will be the crew's toilet, and then the crew's berths and lockers. A stateroom for Capt. William A. Miller, who will command the Kanawha, follows aft, and also a room for the chief engineer. Further aft the galley will be found, and this will extend the full width of the vessel. Mr. Duncan's quarters are to be arranged aft, as shown in the plan accompanying this description, which is reproduced from plates made by the New York Herald. They will consist of two staterooms, 8 feet 6 inches long, and the full width of the yacht. These rooms will be finished in maple, with bird's-eye maple panels. Sliding doors will be between the rooms, and on either side of the doors a full length mirror will be placed. A sliding door will connect the starboard room with the toilet room directly aft. A single berth stateroom, a bath room and two clothes closets are aft of the toilet room. On the opposite side of the yacht will be two guests' staterooms, separated from the rooms on the starboard side by a passage way of 30 inches. Directly aft of the staterooms will be the main saloon, which will be finished in ivory and gold. The staterooms, saloon, etc., will be lighted and ventilated by skylights and port lights. In the saloon will be racks for bric-a-brac and spaces for small piano and desk. The entrance is from the main deck by a wide companionway. The yacht will be lighted throughout by electric lights, and there will be a powerful searchlight in its proper place. Steam heaters will be furnished for the saloon, staterooms, etc., and in the matter of upholstery everything in the saloon and rooms will be handsome and complete. The decks of the yacht will be of clear white pine and the bulwarks of teak. Three boats and a launch will be carried on the davits.

The machinery will consist of a triple-expansion engine and water-tube boiler, designed by the builders. The speed guaranteed is 16 miles per hour for three consecutive hours, over a measured course, but all interested in her construction have good reasons for believing that she will be considerably faster than this. The Kanawha will be delivered to Mr. Duncan on or before June 1. Her steel frames and steel deck beams are in place, the planking is put on and the machinery and boiler are well under way.



THE NEW STEAM YACHT KANAWHA.—Building by Charles L. Seabury & Co., Nyack-on-the-Hudson, for John P. Duncan, New York.

WILL RECOMMEND A SLIGHT CHANGE.

To the Editor of The Marine Record:

In connection with your editorial printed in last week's issue I thank you for the suggestion therein contained, and will gladly suggest to the sub-committee in charge of Senate bill No. 2,162 an amendment which will cover the difficulty to which you refer, so that line 2, page 35 will read, "carrying fifty or more passengers." This will avoid conflict with a court decision which might occur if the words "for revenue" were used. This decision was handed down by Mr. Justice Grier, in the case of the Philadelphia & Reading Railroad Co. *vs.* Derby (14 Howard, 486) in which he said, "When carriers undertake to convey persons by the powerful, but dangerous enemy steam, public policy and safety require that they be held to the greatest care and diligence. And whether the consideration for such transportation be pecuniary or otherwise (the defendant in error was a stockholder) the personal safety of the passengers should not be left to the sport of chance or negligence of careless agents."

In constructing Senate bill 2162, the only object in view has been to bring the steamboat laws up to date and modern practice, as I do not think such laws should contain untried theories. Respectfully,

JAMES A. DUMONT,
Supervising Inspector General.
U. S. Steamboat Inspection Service.

Washington, March 23, 1896.

NEED MORE OF THE SAME MIND.

At a speech recently delivered at a Cincinnati banquet, Senator-elect Foraker expressed his views as follows:

"I want to see our merchant marine restored. There was a time when our merchant marine was the pride of every American. It is to-day but a mortification to us all. We once carried 90 per cent of our foreign trade in American bottoms under the American flag. We now carry less than 13 per cent. We are paying out annually more than $150,000,000 in gold to foreign ships for transportation of freights and passengers. The time has come to remedy that. The way to remedy it is not with subsidies and bounties, but by going back to the first thing practiced by George Washington and the founders of this republic when they applied the principles of protection to the water as well as to the land. (Applause.)

"I want to see the Congress of the United States provide that the 50 per cent or more of imports that come into our country, free of duty, shall come in free, provided that they come in American bottoms and under the American flag. (Applause.) I want to see it provided that the dutiable goods brought in American ships shall be allowed a rebate on that account.

"And when we make these new reciprocity treaties, which we hope to make soon in the future, I want to see incorporated in every one of them a provision that the goods mentioned in the reciprocity treaty shall have the benefits of that, provided they are carried in the ships of the reciprocity country. (Great applause.) When that shall be done, as done it can and should be, there will be no longer an elbowing by Great Britain of the American marine off the waters of the globe. (Applause.)

"Shipbuilding will revive, and once again the flag of the United States will be seen floating in all the channels of trade and commerce. (Cheers.) And then after that will follow easily and naturally what we should have had ere this, an American navy able to protect us, let come what may. (Applause.) When Mr. Cleveland sent to Congress his Venezuelan message it had more good results than one. One of its good results was to impress the American people with our defenceless situation. We should realize that the great wars of the future, if there be any at all with which we are to be concerned, are far more likely to be on the water than on the land. We should order accordingly. It is a patriotic duty to do it."

LAKE CARRIERS' ASSOCIATION.

To consider and take action upon all general questions relating to the navigation and carrying business of the Great Lakes, maintain necessary shipping offices and in general to protect the common interest of Lake Carriers, and improve the character of the service rendered to the public.

PRESIDENT.

J. J. H. BROWN, Buffalo, N. Y.

VICE PRESIDENTS.

H. H. Brown,	Cleveland.	C. A. Eddy,	Bay City.
J. W. Millen,	Detroit	G. G. Hadley,	Toledo.
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CHARLES H. KEEP, Buffalo, N. Y.

TREASURER.

GEORGE P. MCKAY, Cleveland, O.

COUNSEL.

HARVEY D. GOULDER, Cleveland. O.

SPRING SCALE OF WAGES.

A meeting of the finance committee of the Lake Carriers' Association was held in the Perry-Payne building Wednesday, President Brown and Secretary Keep being in attendance from Buffalo. The principal object of the evening was to fix a scale of wages for the spring months. This card shows a uniform advance of 12½ per cent over the scale set for the spring of 1895.

President Brown and Secretary Keep were instructed to urge upon the Treasury officials the need for deputy collectors ot the Mesaba ore docks at Duluth. They were also directed to make further arrangements with the government, if possible, in regards to lights at Ballard's Reef, Detroit River, and the Middle Ground at Port Huron. Captains McKay and Mack were appointed a committee to arrange for lighting the new channel at Grosse Point.

It was decided to open a shipping office at Milwaukee in compliance with the request made by the interests of that port at the annual meeting. A. R. Rumsey was appointed chief shipping master, and a committee consisting of H. A. Hawgood, M. A. Bradley, Capt. W. S. Mack, Captain Thomas Wilson, and James Corrigan was appointed to look after appointments of shipping masters and other shipping office details.

The card of wages adopted is as follows:

FIRST-CLASS STEAMERS.

	Per month.
Chief engineer	112 50
Second engineer	78 75

SECOND-CLASS STEAMERS.

Chief engineer	$84 00 to $101 50
Second engineer	67 50

THIRD CLASS STEAMERS.

Chief engineer	67 50 to 84 00
Second engineer	56 00
First mates	56 00 to 78 75
Second mates	43 75 to 56 00
Cooks	43 75 to 56 00
Helpers to cooks	11 00 to 17 00
Firemen	28 50 to 33 75
Wheelsmen	28 50 to 32 75
Lookouts	22 50 to 33 75
Deckhands	13 50 to 18 75
Oilers	28 50 to 33 75

Firemen, fitting out and laying up, $1.25 per day and board themselves.

CONSORTS AND SAIL.

	Per month.
First mates	$33 75 to $51 50
Second mates	28 50 to 43 75
Cooks	28 50 to 33 75
Seamen	28 50 to 33 75
Boys	13 50 to 18 75

PERSONAL.

Wm. L. Brown, of the firm of Pickands, Brown & Co., dealers in pig iron, iron ore, coke, etc., The Rookery Building, and who is also president of the Chicago Ship Building Co., sailed for Europe on Saturday, the 14th. Mr. Brown, who is accompanied by his wife, will be away some six or eight weeks for change of scene and recreation, and during the course of his sojourn abroad, will visit the principal shipbuilding yards in the north of England and Scotland.

Prof. Mark W. Harrington, late chief of the United States Weather Bureau, intends to establish a department of terrestrial physics and geography in the University of Washington.

MARINE RECORD Office for Hydrographic Charts.

NEWS AROUND THE LAKES.

CHICAGO.

MASTERS RETURNING FROM WINTER TRIPS—MOVEMENTS ABOUT CHICAGO HARBOR.

Special Correspondence to The Marine Record.

CHICAGO, March 24.

The schooner John B. Wilber, Capt. David Williams, which arrived here at the end of November last, with lumber from Menominee consigned to the South Branch Lumber Co. was unloaded the early part of last week, since which time she has had her topsides and decks recalked and received some necessary repairs, and is now in good shape to take on a load of grain for Port Huron.

Capt. A. H. Cain, who commanded the steamer Bulgaria last season, returned from the West on Saturday, on his way home to Port Huron. He has been spending two months in Southern California, and while there visited Captains William Pringle and Dan MacDonald at Santiago, and Capt. Joseph Cotttell at Redlands, where Capt. Joe has a splendid orange grove and a very nice home.

Carr & Blair chartered the steamer A. G. Lindsay for oats to Ogdensburg at 2¾c; the steamer Charles Hebard and schooners Annabel Wilson and R. L. Fryer for corn to Ogdensburg at 4c.

The Dunham Tug Co. towed the steamer Madagascar to the Calumet elevator at South Chicago; the schooner City of Sheboygon to the Atlantic elevator; the steamer Delaware to Miller Bros'. dry-dock; the steamer Tom Adams to Armour's "C" elevator; the steamers John Ruger to Armour's "A" & "B" elevators; the steamer A. G. Lindsay to the Calumet elevator at South Chicago; the steamer Charles Hebard to the Union elevator; the schooner Annie M. Ash to the City elevator; the steamer Chili from South Chicago to the sugar refinery at Twelfth street.

The Dunham Towing Co's tug T. T. Morford was towed to South Chicago on Monday, and received her new boiler. The Morford will be completed and put in commission soon after April 1, and with the improvements in her machinery and a more powerful boiler, will be a better boat than when she first came out.

The Independent Tug Line towed the steamer Toltec to the Union elevator; the steamer A. A. Parker to Armour's "E" elevator; the schooner Iron Cliff to the Santa Fe and Indiana elevators, the steamer C. W. Elphicke to the Rock Island elevator; the steamer Rutter to the Atlantic elevator, the steamer J. W. Westcott to Miller Bros.' shipyard; the schooner H. A. Richmond to the Independent Coal Co's dock to unship her foremast.

The Inpependent Tug Line have leased the offices and dock front, for many years occupied by the Chicago Vessel Owners' Towing Company, and will move into their new offices on May 19. The Independent Tug Line will do the towing of the Lehigh Valley Line of steamers at this port during next season.

The Northern Michigan Line steamer City of Charlevoix, Capt. William Finucan, will leave Manitowoc for Chicago on April 20, and will leave Chicago on her first trip to Northern Michigan ports on April 4.

The Graham & Morton Transportation Company have chartered the steamer Mabel Bradshaw, and will place her on their route between Benton Harbor, St. Joseph, and Chicago on March 31. The Bradshaw will continue to run until the company's steamer City of Louisville, which is receiving alterations and new machinery at Milwaukee, is completed.

Chicagoans are greatly displeased over intimations from Washington that the appropriations for both the Chicago and Calumet rivers are to be about $200,000, and that the Calumet is to be as well treated as the main harbor. If the sum is to be as small as that it is said such a division will be unsatisfactory, owing to the vast interests on the old river, as compared with the commerce of the Calumet.

THOMAS WILLIAMS.

CLEVELAND.

PROPOSITION TO SPEND $500,000 ON THE INNER HARBOR FURTHER INDORSED—MARRIAGE OF A NAVAL ARCHITECT —NORTHERN LINE ARRANGEMENTS — LUMBER-HANDLING RATES.

CLEVELAND, March 25.

Messrs. Samuel Mather, C. F. Brush, L. E. Holden, and W. M. Day, who were appointed a committee to consider the advisability of further bonding the city for public improvements, has given its hearty endorsement to the plans heretofore proposed, to spend $500,000 in improving the inner harbor by deepening and straightening the Cuyahoga river, and for $1,000,000 to be expended in the construction of a flushing tunnel to be used for purifying the waters of the river.

Mr. W. J. Wood, N. A., who is at present with the Goodrich Transportation Co., at Chicago and Manitowoc, was quietly wedded in this city on the 11th inst., to Miss Selma, youngest daughter of the late Professor Georgi. Mrs. Wood is well known in Cleveland, being a graduate of the Cleveland school of elocution and oratory; and has for several years been permanently identified with the Cleveland Musical and Literary Society, having occupied the chair at the annual banquet last year. She is an accomplished equestrienne, and is as much a lover of fine horses as is her husband. They are now absent on their wedding trip and are spending some weeks at Manitowoc, but will probably locate permanently in Cleveland.

The new slip and dock which the Pennsylvania Co., is to build on the lake front east of the river is for the fueling pockets to be used in furnishing coal to the Northern Line steamers on their way up and down the lakes. It will also be fitted up as a passenger dock, with first-class quarters. To make it accessible with less danger an overhead way from Front street, a little below Water street, has been provided. The passenger steamers will not need to enter the river at all, and the delay incidental to that operation, as well as the services of a tender, to which they resorted last season will be dispensed with. The passenger boats have heretofore been fueled at Buffalo. The Cleveland Dredge Co., will make channels to the new dock. The dock will be 623 feet long by 210 feet deep.

Grand Secretary Benjamin J. Perkins, of the American Association of Masters and Pilots, from Camden, N. J, is in Cleveland on an organizing tour. He has just formed a harbor at Buffalo with 77 charter members, an excellent start. He is stopping at the Weddell House, and will call a meeting of the licensed men shortly. See the daily papers for the call. Mr. Perkins will also organize at Toledo, Detroit and Port Huron. The association has a healthy local organization at Chicago.

The marine fraternity all over the lakes will regret to learn of the death ot Capt. Henry J. Trinter last Saturday, at his home in Vermillion, after a lingering illness with dropsy. His funeral occurred on Tuesday. He commanded the schooner Sophia Minch and steamer A. Everett, resigning the command of the latter two seasons ago because of ill health. He was 45 years of age, and an influential member of the Masonic Order. He leaves a wife, daughter and four sons.

Mr. John Stang, the well-known dredging contractor, suffered a stroke of apoplexy last Saturday evening at his home in Lorain, to which he had returned after a busy day at Sandusky. His right side was partially paralyzed, but the effects of the stroke are, fortunately, proving but temporary, and he is expected to be all right again in a few days.

The package freight handlers have decided to form a union, and to this end have called a meeting for Friday evening at the Marine Firemen's room on Elm street. Their complaint is chiefly agrinst the stevedores, who, they claim, are making unjust profits from their labor.

Messrs. C. R. Jones & Co. and J. E. Mills, representing the vessel and lumber interests, after several meetings with the union lumber handlers, which were without result, have made a season's contract with Jacob Powitzki at the following rates which are about the same as last year. White and Norway pine boards, strips, mill culls 22c (23c last year); bill stuff, 2x4 to 2x14, twenty feet and longer, 24c (26c last year); timber, 3x4 to 10x10, 3 and 4 inch Norway plank, 28c; timber larger than 10x10, 35c; all timber in hold, extra per M, 10c; shorts, if more than 25 per cent of cargo, 35c; lath and shingles, 5c; basswood, hemlock and elm, 25c; hardwood lumber, 35c (38c last year); fence posts, 4 inches and over per hundred, 70c (75c last year); grape posts, 3½ inches and under, per hundred 40c; cedar ties, each, 1½c; tamarack ties, each, 1¾c (2c last year). Boats without deckloads 5c additional per M; with deckloads only, 4c less per M. Boats over 12 feet in the hold, (government measure) $2.50 extra for each six inches or fraction thereof over 12 feet. Boats with more than one cross beam in hold, or with overhead arches, 3c per M. extra.

BUFFALO.

LUMBER DEALERS WANT INSURANCE ON DECK LOADS THIS SEASON — ANCHOR LINE ARRANGEMENTS — FEW SIGNS OF OPENING—UNDERWRITERS IN SESSION.

Special Correspondence to The Marine Record.

BUFFALO, March 25.

In Buffalo marine circles it is still the deepest of midwinter. It is true that the package freight lines have come to an agreement not to sail till after April 15, but this was a mere matter of routine, and was brought about with little reference to the opening of the season. All that it signifies is that no one need make any preparation to send his boats out before the 15th. Rates on package freight are at last under way, but the New York meeting last week did not progress far enough to close the agreement finally at east-bound rates, which are really about all that amount to much to the lakes direct, will be fixed by the lake managers here, probably this week.

Somebody has started the story that the Anchor Line has offered its wooden boats for sale and it is making the rounds. The Anchor Line people say that the story is without foundation. They would sell the Gordon Campbell, but she has been for sale some time. As to the others, the company has no particular wish to sell them. They will carry 2,000 tons easily, and they have an official sailing record of from 9½ to 12 miles an hour, while the new straight-backs of the line made only 13 last season. The report that the Campbell will not be brought out this season is also without meaning, for she is always left to the last, being the smallest, and that is all there is to the matter. So far the line has

not chartered any outside craft, but it will probably do so. Manager Evans is at the seaboard now, and will no doubt settle the matter before he returns.

Lumbermen who are in the lake trade are at work on a new form of marine insurance policy. For some reason it appears that the policies have not covered the deck loads, strange as it may appear. It will be some time before the matter is arranged, but the Albany members of the trade have signed the form that has been prepared, and there is not much to do but to obtain the consent of the agents, who are supposed to be agreeable to the plan.

Our marine insurance men are not a little put out on account of the capture of the Duluth flour and grain risks by the British & Foreign Co. They do not seem to have been caught napping, for one of them remarked on reading the announcement that he thought it would turn out that way. There appears to have been a feeling of timidity over possible losses, such as were sustained by the British company last season, and a desire to let the foreigners have a second taste of the same bitter dose that caused the lake underwriters to hold back. There is not difference enough between 12½c and 15c, the old and new ratio, to save the company from loss.

Louis Pfohl & Son are looking sharply after all sorts of damaged or wrecked lake freight on the lakes. They have been after a lumber cargo of the barge Levi Rawson at Marine City, where she is sunk loaded, but they find that there are salvage claims in the way. The Rawson was abandoned in mid-lake and picked up by a local tug, which brought her inside and let her settle on the bottom. When she delivers her cargo in Toledo there will have to be an adjustment and all claims will be paid, but till that is done the cargo is not a very safe thing to handle.

The winter cargoes of the fleet laid up here are coming out in remarkably fine shape with the exception of the wheat from the Adriatic, which merely suffered from a bursted pipe. Most of them overrun considerably. The Stone was over 202 bushels on her barley, the Grover 84, and the Roumania 92 on her wheat. The Italia, Lyon and John F. Eddy are still to come out.

Hand & Johnson Tug Line appointments are as follows: Tugs—Cascade, Capt. P. Linn, Engineer T. Riley: Hebard, Capt. A. Walters, Engineer J. Reilly; Davis, Capt. J. Gray, Engineer H. Bullard; Babcock, Capt. J. Doyle, Enginneer M. Upper; Danforth, Capt. J. Whalen, Engineers J. Byers; Conneaut, Capt. J. Lawson, Engineer C. Schryver; Byers, Capt. J. Hazen, Engineer J. Frates.

One of the owners of the Globe is A. R. Atkins. There are others interested in the steamer besides Mr. Gordon and Mr. Atkins, but it is stated that the builders retained nothing in her. It is of course arranged that she will be sailed by Capt. Campau, who was appointed before the sale, but the trade that she will enter is still to be settled.

Harvey Beeson was down from Chicago a day or two ago, looking after the interest of his year book.

There has not been a season in a long time when marine men were so scarce. It is time that captains and engineers were thick and out-of-town vessel owners were thick, but they are very far between so far. One a day is a large average.

Manager F. P. Gordon, of the lake insurance brokerage office of Johnson and Higgins, is getting very uneasy over the failure of the new Guaranty Building to get into shape for its tenants. It's a bad joke on the signal service people for the building to hang fire so long. On the supposition that the building was about complete the office was moved in from the Board of Trade Building on the first of the month, much against the will of the owners who were deserted. A visit to the building to-day found everything in the usual unfinished state, and the men in charge with a promise that the elevators would begin to carry passengers "in a few days," when it is stated that the signal office is on the fourteenth floor, with a tower to climb on the roof of that, a person can get some idea of the fun it must be to run the weather business these days.

Vessel brokers are of the opinion that there will not be any coal rates made this week. They cannot get shippers to talk rates at all and nearly all the coal in stock is in one or two hands.

Harbor No. 41 of the American Association of Masters and Pilots was organized Sunday at the tug pilots' rooms. The following officers were elected; captain, G. H. Vroman: first pilot, John Dissett; second pilot, James Kinney; captain's clerk, J. P. Fontaine; purser, Samuel M. Sloan; chaplain, Thomas Doyle; trustee, Charles Maytham, Charles Nash, ond H. H. Vroman.

The Northern Steamship Co., has leased property with about 1,500 feet frontage, facing on the Blackwell canal and Ganson street and owned by the Pennsylvania Coal Co. They will erect a large freight house. The Northern line has never had a freight house of its own and has had to "peddle" considerably. It is figured that the new plan will give each of the six freighboats three more trips a season. The passenger steamt ers will land as heretofore at the foot of Main street.

The lake underwriters are in session at the Iroquois and have given out that they will continue for two days before coming to an understanding on the season's hull rates. The proceedings today were largely informal, as there was need of a general exchange of views before any final action can be taken. All but one or two general agencies are directly represented. Those in attendance are J. J. Clark and A. H. McDowell of Detroit, C. W. Elphicke, J. J. Rardon, J. S. Wall and J. C. Gadsden of Chicago; F. R. Bigelow of St. Paul, David Vance of Milwaukee; James J. Riley of New York; and W. J. Sandrock and H. S. Sill of Buffalo. There is every prospect of an agreement that is generally satisfactory. J. J. Clark is chairman of the meeting. There are reports of some hull business being done at low rates already, but it is certain that nothing like the sweeping business done last year before the hull meeting was held has been transacted.

The Buffalo, Rochester & Pittsburg Railway has its new fuel pockets on the slip above the Blackwell bridge at Michigan street well under way and will make something of an innovation in thus handling soft coal after the fashion of hard. Vessel men say that fuel is bound to be very cheap this season on account of the increased competition.

JOHN CHAMBERLIN.

DULUTH AND SUPERIOR.

ABOUT 100,000 TONS EACH OF HARD AND SOFT COAL AT THE HEAD OF THE LAKES MAY 1.—VESSEL AGENTS AND THE FOREIGN UNDERWRITERS—NOT MUCH ICE.

Special Correspondence to The Marine Record.

DULUTH, Minn., March 24.

W. A. Prime, the representative of the British and Foreign syndicate, has left Duluth for the East, after having made a satisfactory closing up of the deal for wheat cargo insurance for the coming season. The syndicate, it is claimed has secured a rate slightly in advance of the rates prevailing last year.

The vessel agents here do not feel that they have any grievance against the syndicate, but they are very sore at the shippers. In speaking of the matter, a prominent vessel agent said to the MARINE RECORD correspondent:

"There is no reason why the British and Foreign syndicate should have the business. If the shippers would only allow us to make a living, and it would cost them nothing to do so, we could write the insurance. If the shippers were making anything out of the deal, we would not complain; but it does not make a cent's difference to them who writes the insurance. In fact, it costs them more to let the syndicate do the business than if the vessel agent did it. We, of course, got a commission for all the insurance we wrote on cargoes, but the shipper didn't pay it, as he sold his wheat C. I. F. (cost, insurance and freight) in Buffalo, or to whatever port it was shipped, and eventually the consumer had to pay-this commission. How much difference did it make to the consumer when the syndicate took hold of the business last year?

"Under the new system the syndicate gets all the business, the shipper does all the work for nothing, and we get left. If the shippers would only do the right thing—which would not cost them one cent—we would make a living, American companies would do the business, and every one here would be better satisfied."

The machinery of the Northern Steamship Co.'s passenger steamers, North Land and North West, is being overhauled to see what repairs are necessary. This is preparatory to fitting up the boats for the season, which will be begun in a short time.

Several new discoveries of iron have been made recently, on the Vermillion range, and they are showing up excellently.

A movement is on foot to build a railroad from the Atkokan range to the head of navigation at Rainy Lake Such a road will complete the connection between Port Arthur and the Lake of the Woods and Rainy Lake making tributary to Port Arthur 400 square miles of territory, rich in iron, gold, pine and agricultural lands.

Captain Major, owner of the Hattie Lloyd, has purchased the little steamer Belle, of Chicago, and will bring her to Duluth at the opening of navigation to run in connection with the Hattie as a ferry. The Belle can do 13 miles an hour.

It is estimated that about 200,000 tons of coal will be on hand at the head of the lakes May 1, and that the stocks will be about evenly divided as to anthracite and bituminous. At the same time last year there was half a million tons on hand, of which about two-thirds was anthracite. The small amount on hand this year is regarded as practically a clean-up for the opening of navigation.

There is every evidence that the ice field on Lake Superior, in this vicinlty, will break up early. A wide strip of blue water is plainly visible a few miles from the harbor.

Work upon the several barges in course of construction at the American Seeel Barge Co's yards has been suspended temporarily, until the arrival of material from Pittsburg. The boats being constructed on builders' account are practically completed, and will probably be launched about May 1.

The McCord Mumber Co., is pushing the work of construction of its docks opposite the mill, and it is expected that at at the opening of navigation the company will have a dock with lumber storage capacity for 2,000,000 feet. The company expects to cut from 26,000.000 to 30,000,000 feet of lumber the coming season.

Howard James has been appointed purchasing agent of the Northern Steamship Co., with headquarters in Duluth.

Some lumber charters have been made, but on the basis of an unknown opening rate, the consideration in the first cargo to establish the freight. Shippers, of course, predict a weak opening, while vessel men are taking a brighter view of things. In this connection it is stated that one vessel owner has signified a willingness to charter at $1.50, but $1.75 or better seems to be the prevailing sentiment.

The largest trade for cargo shipment reported this year, is a sale by Mitchell & McClure of 2,000,000 feet of good stock, in the log, for the eastern market.

ELLIS E. BEEBE.

COLLINGWOOD.

PREPARATIONS FOR NAVIGATION BEGINNING, NOTWITHSTANDING THE IMMENSE FIELD OF ICE.—A NEW STEAM YACHT.

Special Correspondence to The Marine Record.

COLLINGWOOD, ONT., March 27.

Mariners are beginning to prepare for an approaching season of navigation. The engineers of the North Shore Navigation Co. and the Great Northern Transit Co. have commenced work.

The steamer John J. Long, owned by Messrs J. & C. Noble, will run on the Killarney and Detroit route, the same as in last season.

Mrs. William Lockerbie, wife of the chief engineer of the C. P. R. steamer Athabasca, died at Owen Sound on Thursday. Her remains were brought here and interred on Sunday.

The fishing fleet which will leave here this spring will be as large as in former years.

The ice on the harbor is thicker now than at any time during the winter, and extends out into the bay, as far as can be seen. It shows no signs of moving yet.

Messrs. Watts & Sons have secured an order for a steam yacht for a hunting club which owns a reserve among the islands on the east shore of Georgian Bay. The dimensions are: Length of keel, 36 feet; length over all, 40 feet; beam, 9 feet. A Fitzgibbons boiler 3x6 feet will supply steam to a 6x8 inch Inglis engine. The contracts call for completion on May 1.

The C. P. R. steamers Manitoba, Alberta and Athbasca, are being fitted out. The Alberta will go on the Windsor and Fort William route and the Manitoba and Alberta will run between Owen Sound and Fort William.

W.

DETROIT.

WRECKING FIRM BRANCHING OUT—LONGSHOREMEN FIX RATES.

Special Correspondence to The Marine Record.

DETROIT, March 24.

Harris W. Baker and C. A. Chamberlin have bought the tug Champion from the Grummond estate, and will fit her out in the best possible manner for wrecking and lake towing purposes.

The local longshoremen have fixed the following schedule for 1896: Iron ore, 15c per ton; unloading stone, 20c per cord; cordwood over the rail, 25c per cord, hold 9 feet or less, over 9 feet 20c per cord; piling in yard, 25c per cord, loading and unloading scrap iron, 35c per ton. Wrecking, 40c per hour from start to return, ordinary hour work, 30c.

D. & C. officials count upon sending the City of Detroit out next Saturday morning, unless the condition of the ice changes for the worse.

The Union Transit Co. has leased Bissell's big wharf, foot of First street.

Henry W. Botsford, Capt. Carey and J. E. Miller & Sons, have purchased the tug Sumner, and will convert it into a steam barge for carrying coal from Cleveland to this port.

OBITUARY.

CAPT. DAVID Z. CLOW.

CHICAGO, March 24.

Capt. David Z. Clow, aged 74 years, died at his home at Crystal Lake last Thursday at noon, of blood poisoning. Capt. Clow commenced sailing on the lakes many years ago. He built the schooner Honest John at Oak Creek, Wis., in 1848 and sailed her, about six weeks when he sold her. He then went to Chambers Island, Green Bay, Wis., and commenced to build the schooner Sarah Clow, which took him 13 years to complete. She was built from timber cut off his farm and whip-sawed out. He sailed her during the war and then sold her. He then built the schooner Lewis Day at the same place and under the same conditions. After the loss of the Lewis Day, Capt. Clow sailed and owned the schooner A. P. Nichols, which was lost on Pilot Island in the fall of 1893, when he gave up sailing. Capt. Clow was much respected among his fellow men as a sterling, honest man of good repute. He leaves five sons and two daughters. Two of his sons follow their father's occupation of sailing. Capt. Oscar Clow, his eldest son, is in the employ of the Spaulding Lumber Co., and also does good work as a ship builder during the winter months at this port.

WILLIAMS.

WELL EQUIPPED FOR BUSINESS.

Messrs. Parker & Millen, of Detroit, have enlarged, remodeled, and decorated and furnished their offices at No. 15 Atwater street, West, in a manner to more efficiently care for the varied branches of their rapidly growing business. In addition to the general offices there are provided handsome private rooms for the members of the firm. Mr. A. A. Parker has active charge of the marine insurance business, and represents the Western (of Ontario), British and Foreign (of England), Standard, Security, Orient, London (of England), Commercial Union (of England), British America (of Toronto), and others.

The fire insurance business is managed by Mr. W. A. Eldridge, also traffic manager of the Red Star Line, and who is aided by J. E. Dickinson, assistant manager. They look after the insurance of eight fire insurance companies, including the Niagara and Continental, of New York, the Firemen's Fund, of California, the Cooper, of Ohio, and the Fire Association, of Philadelphia.

Capt. J. W. Millen looks after the Swain Wrecking Co.'s towing and wrecking business, directing both the Canadian and American tugs in the hands of the firm, as well as the well-known wrecking tug Favorite, which will be in charge this year, according to present arrangements, of Capt. P. L. Millen, former commander of the Centurion. The wreckers Saginaw and Wales are stationed at Detroit, as well as the tugs Balize and Onaping (Br.) and are looked after by Capt. Joseph King. The Swain Wrecking Co. includes ten steam pumps, which are looked after by John S. Quinn and James Quinn, who are also professional divers, and who operate under the firm name of John S. Quinn & Co.

Mr. J. O. Snyder is chief engineer of the firm's floating property. His post is quite important, as besides the four steamers and four schooners of the "Iron" fleet, owned by the Detroit, Hamtramck, and Duluth & Atlantic Transportation Cos., and the towing and wrecking fleet, he has to look after the steamers Greyhound and City of Toledo, of the Red Star Line. William W. Sumner has charge of the clerical works of the firm's steamship and other marine business.

There is also a private office provided for Mr. B. W. Parker, who conducts the firm's jobbing and retail business in coal, coke and sand, the yard and warehouse being at the corner of Riopelle and Atwater streets.

Although the firm has so many branches of business, all moneys taken in and disbursed through these varied channels is deposited with and disbursed by one money department, which is directed by Mr. I. W. Green, the general cashier. Parker & Millen have good reasons for counting on a much heavier business next season than they have ever enjoyed before, and have the best facilities for taking care of what offers. They are equipped with a long distance telephone (No. 690) and a private telegraph (Postal) line, and are in every way equipped to make things hum.

NOTICE TO MARINERS.

SANDUSKY BAY STRAIGHT CHANNEL.

Sandusky Bay Range Light (front).—Notice is given that, on or about April 1, 1896, a fixed white light of the sixth order will be established in the structure recently erected on the northerly prolongation of the axis of the Straight Channel in Sandusky Bay, in 5½ feet of water, about ¼ mile NNW. ⅞ W. from Cedar Point Light House, and about 500 feet northerly from the 18-foot contour on the northerly side of "Deep Hole" off Cedar Point. The light will be shown from an octagonal lantern, with copper roof, surmounting a square tower projecting slightly from the southerly side of a square one-story dwelling, with sharp roof and dormers, sliding on a square red crib. The house and tower are of wood, painted yellowish drab. The focal plane of the light will be 33½ feet above mean lake level.

The approximate geographical position of the light, as taken from chart No. 43 of the U. S. Survey of the Northern and Northwestern Lakes, is: Latitude, north, 41° 29′ (31″); longitude, west, 82° 41′ (49″).

Sandusky Bay Range Light (rear).—On the same date a fixed white light of the sixth order will be established in the structure recently erected on the northerly prolongation of the axis of the Straight Channel in Sandusky Bay, in 8½ feet of water, and about 1,500 feet N. 17° 04′ E. (N. by E. ½ E.) in rear of the front light. The light will be shown from an octagonal lantern, with copper roof, surmounting a square, pyramidal, yellowish drab, wooden tower, on a square red crib. The focal plane of the light will be 50 feet above mean lake level and the light may be seen in clear weather, the observer's eye 15 feet above lake level, nearly 14½ miles.

The approximate geographical position of the light, as taken from the above chart is: Latitude, north, 41° 29′ (45″); longitude, west, 82° 41′ (44″).

Each light will illuminate 270° of the horizon, from S. 27° 56′ E. (SSE. ½ E.) through eastward and southward to N. 62° 04′ E. (NE. by E. ½ E.) (bearings from seaward) or 45° to the westward of the range line, and the remainder of the illuminated arc to the eastward of the range line, and showing in the lake.

The lights mark a range line for running the Straight Channel in Sandusky Bay, from Cedar Point to the docks of Sandusky, coinciding with the axis of the channel. Bearings are true.

On the establishment of the Sandusky Bay (Straight Channel) Range Lights, the lights of the two ranges in the northerly part of Sandusky Bay, about 1¼ miles west of Cedar Point and heretofore marking the axes of the old dredged channels in the bay, will no longer be required as aids to navigation and will be discontinued.

WHITEFISH POINT LIGHT.

Notice is given by order of the Lighthouse Board that on the opening of navigation, 1896, the character of the light at this station, on Whitefish Point, west side of the entrance from Whitefish Bay into Lake superior, will be changed to show a brilliant white flash every five seconds.

MARINE RECORD Office for Hydrographic Charts.

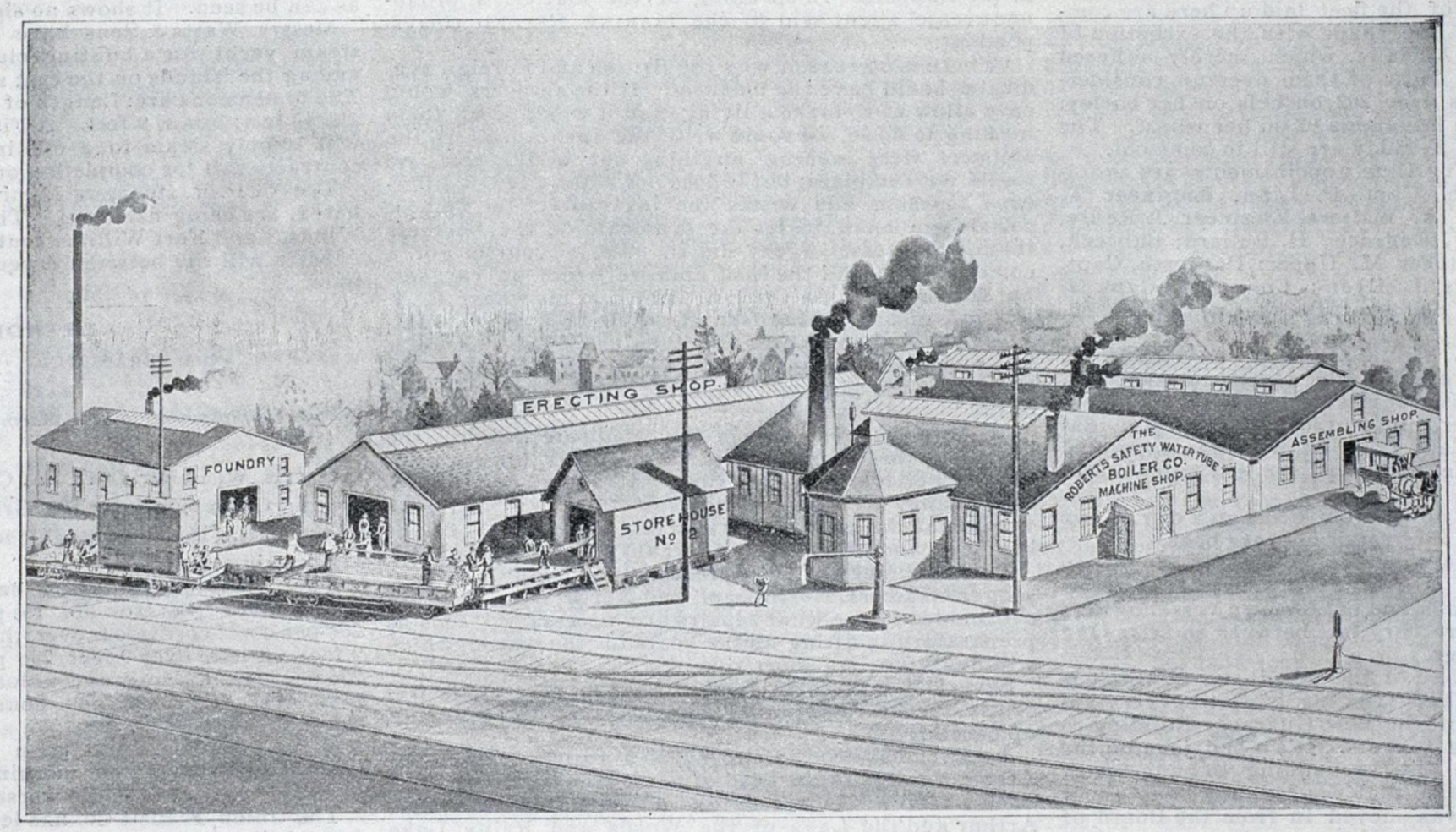
SHORT HISTORY OF THE ROBERTS BOILER CO.

In the year 1878 Mr. E. E. Roberts, the inventor of the Roberts safety water-tube boiler, took up his residence on the banks of the Shrewsbury River, and being passionately fond of aquatic sports, and particularly so of steam yachts, he commenced the construction of one the next year according to his own ideas, and invented the boiler which bears his name, and which is manufactured by the company of which he is president. This steam yacht was the first one to contain a Roberts water-tube boiler. After having used this boat for two seasons, it was sold to Mr. A. E. Clark, of Chicago. from whom the company has the following letter:

"I cannot see but that the Roberts boiler in the Mamie C. is just as good as it ever was, even if it is 17 years old. I had no complaint from it last summer."

The boiler was constructed of ordinary material which could be obtained anywhere in the open market. Nothing was made specially for it. It was so successsul that other people who saw its advantages requested Mr. Roberts to build similar boilers for their boats, and the demand increased so that he was forced from his business as consulting engineer into that of manufacturing the Roberts safety water-tube boiler. The demand for these boilers has increased year after year, on their own merits since the above date.

On November 1, 1890, The Roberts Safety Water-Tube Boiler Co. was incorporated with a capitalization of $250,000; and a brick building 50x100 feet erected, with the expectation at that time that it would be sufficiently large to meet all demands; it was the first home of this company. By the summer of 1892 it was apparent that it was necessary to double the capacity of the works, and, consequently, a building 50x120 was added to the original one, and additional machinery was purchased. There were also erected shipping platforms, and other appliances to facilitate the loading of the boilers, and a store house for raw material 18x24 feet, two stories high, was also added to the plant. In the early part of 1895 it again became necessary to large the works, and a building 20x125 feet, together with another storehouse 18x24 feet, and a boiler house 15x24 feet were constructed, and the plant was again doubled.



PLANT OF THE ROBERTS SAFETY WATER TUBE BOILER CO.

About a dozen new and specially designed machines have been purchased to facilitate the construction of, and improve the workmanship on their boilers, comprising large power bending rolls, which will handle a steel plate weighing nearly three-quarters of a ton, a 6-inch latest design tapping machine, an 8-inch threading machine with expansion dies, oil pump attachments, etc., together with two similar machines, cutting from half-inch to four-inch pipe, an automatic feed punching machine, with spacing table, used in the construction of boiler castings, a double angle iron shears, which will cut up to 5-inch angles, and a number of punching and shearing machines, cutting-off machines, and circular shears which will shear 1½-inch square bar iron and punch an inch hole in three-quarter plate. The works are operated by the Roberts boiler.

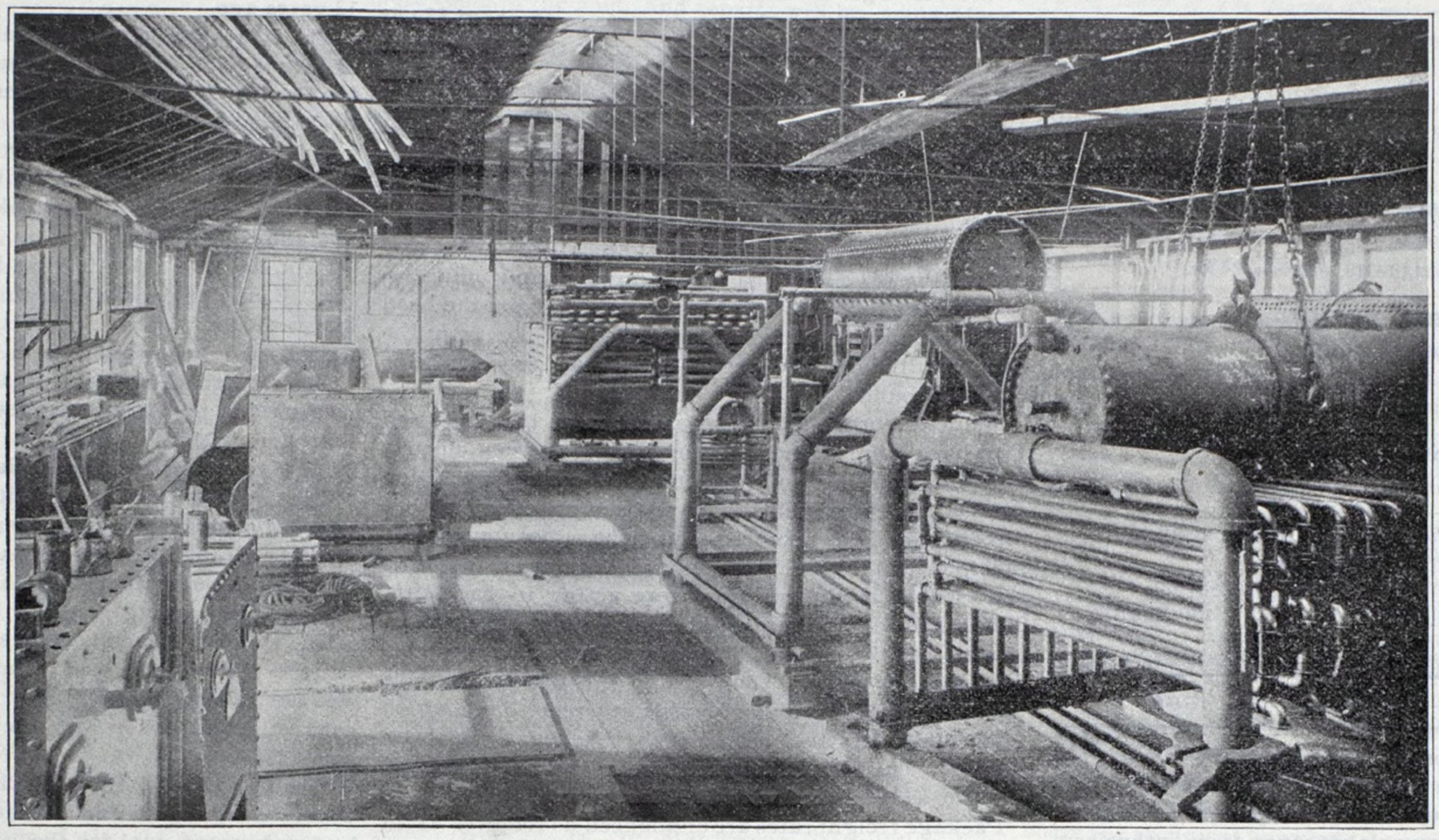
Notwithstanding the numerous additions that have been made to the plant, the business of the company seems to be increasing with such rapidity that the indications point to further additions in the near future.

There have been 800 Roberts boilers built to January 1, 1896, and among those which have lately been shipped from the works is a 300 h. p. boiler which went to

Tacoma, two boilers of 730 h. p. for New York parties, a small boiler of about 10 h. p. which went out on Long Island, and one of 105 h. p. to the same locality. Also one of 150 h. p. which was shipped to Tarboro, N. C., and one of 105 h. p. to the Pennsylvania R. R. Co. In addition to these boilers the company has in course of construction at its works, one boiler of 64 h. p. for William Cole, one of 600 h. p. for the government, one of 430 h. p. for the lake district, a 53 h. p. boiler for Mr. Ware, of Philadelphia, one of 180 h. p. for South America, also one capable of developing 160 h. p. for a Buffalo yachtsman, a 530 h. p. boiler for a ship building concern down east, one of 430 h. p. and one of 64 h. p. for South American parties, and three boilers 360 h. p. each for one of the largest shipbuilding plants in this part of the country. They are also constructing a boiler of 220 h. p. for the government and one of 150 h. p. for Central America, thus making a total of nearly 4,000 horse-power under construction.

The Roberts Boiler Co. have also lately received orders for the following boilers which are not yet in course of construction. One of 150 h. p. for a Buffalo company, one of 65 h. p. from an old customer in Connecticut. The last order taken is for two boilers with a total of about 800 h. p., for a factory in New Jersey. The orders in this latter list have all been taken in less than a week.

The busy season has just commenced, and there is a strong probability therefore that the Roberts Boiler Works will be running night and day as in previous years, to meet the demands necessitated by the orders coming in rapidly.



THE ROBERTS SAFETY WATER TUBE BOILER CO.'S WORKS—ERECTING SHOP.

TRANSFERS.

John Stevenson has bought the small steamer John H. Pauly from Capt. Lon Cook of Cleveland, giving the steamer Toledo in part payment. It is said the Toledo will be put in the package freight trade May 1.

Capt. Thomas Byrne, of Sault Ste. Marie, has sold the steamer Ivanhoe to C. H. Newman, of Chicago, for $14,000 cash and some Chicago real estate.

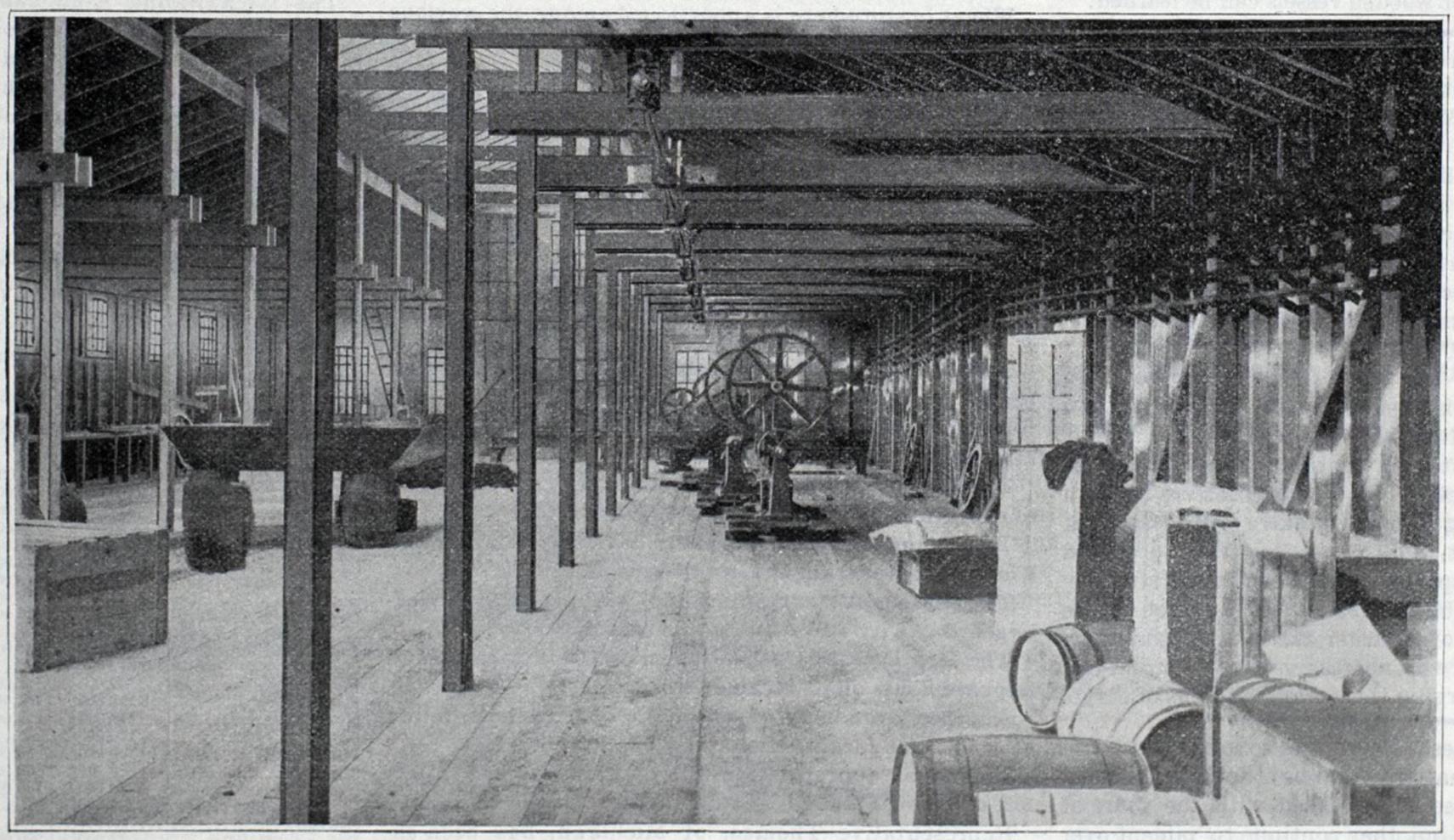
Capt. James Skeldon and Engineer Lee Corns, of Toledo, have purchased a one-third interest in the tug Wisconsin.

The steam yacht Pastime, was sold on Wednesday of last week by the Brownsville, N. Y., Steamboat Co., to F. L. Hall and Capt J. G. Wilson, for $2,000. They will use her for charter purposes on Black River.

The following transfers of vessel property have been received at the Milwaukee customs office for record: Schooner Ida, Edward Christensen of Racine to Anton Christenson of Milwaukee, one-fourth, $1. Same vessel, Anton Christensen to Niels N. Christensen of Milwaukee, one-eighth, $1. Schooner Gen. Hancock, Everine Anderson to H. N. Anderson of Ephraim, Wis., the whole, $350. Schooner Driver, Rasmus Johnson to Halvor Hanson of Sheboygan, one-third, $350.

Capt. Antone Johnson, of Manitowoc, has bought the schooner Merchant, of Racine.

ALTHOUGH it has only been decided by the House Naval Committee to incorporate in the Naval Appropriation bill provision for four battleships and fifteen torpedo boats, the Navy Department authorities are already giving consideration to the design for these vessels. This action is based on the almost absolute certainty that the House will accept the Naval Committee's report and that the Senate will also acquiesce if it does not increase the number of battleships provided for by the House bill.



THE ROBERTS SAFETY WATER TUBE BOILER CO.'S WORKS—ASSEMBLING SHOP (New.

NOTES.

IT is not improbable that the proposed New York dry-dock—when built—may be constructed upon plans furnished by Chauncey M. Dutton, similar in design to his famous pneumatic steel lift locks.

A RECENT speed run of the cruiser Olympia between two Chinese ports is officially reported to have averaged 20 knots an hour, and would have been 23 knots, her officers say, in smoot her water. The Olympia ran under natural draught. Her headway was so great that the decks were swept by the waves, and it was necessary to slow down to avoid damage. As it was, some damage was done.

THE twenty-eighth annual meeting of the Vessel Owners' and Captains' Association was held at Philadelphia on March 4. The new directors were elected, and they were: Peter Read, James McCaulley and James N. Stetson. These officers were elected: President, John L. Nicholson; vice president, Jonathan May; treasurer, Jeremiah Smith; secretary, James Wallace; agent, Thomas G. Crawford.

JAMES H. FLAGLER'S new wooden steam yacht Anita is the center of attraction at Poillon's yard, South Brooklyn. This new addition to the New York fleet is 200 feet long over all, 158 feet between perpendiculars, 150 feet on the water line, 21 feet 9 inches breadth of beam, 12½ feet depth of hold. Her mean draught, with all weights on board, is 8 feet. The engines, of the triple-expansion type, have cylinders 16, 24 and 36 inches and 20 inches stroke of piston. The engine, when making 250 revolutions, furnishes 1,000 i.h.p., and a speed of 18 knots. Chief Engineer Ernest Coles isin charge of the machinery.

SECRETARY HERBERT has directed the test at the New York Navy Yard of a machine designed to send a vessel through water without propellers. By burning oil gas is generated, which is allowed to enter a steam cylinder, where it is ignited by means of a spark, the force of this explosion driving the piston. A jet of air is blown out of tubes iu the stern of the vessel by the explosion and the resistance of the water causes the boat to forge ahead. The inventor claims that it will be of service in the case of torpedo boats and will drive them with phenomenal speed. A 28-foot boat will be used.

Herman Schueneman, of Chicago, has sold the scow Agnes to Capt. I. S. Edwards of Manitowoc.

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CLEVELAND, O., MARCH 26, 1896.

THE steady depression of the lake levels should spur all interested to push the proposed survey which will pass upon the dam project. While opinions as to its effect upon some of the upper lakes range from enthusiasm to skepticism, there is no question of the improvement which a dam at the head of Niagara River would work upon Lake Erie navigation.

"WIZARD" EDISON has developed the X rays discovery to a most useful stage, and has practically reached the point where this mysterious light may be used to detect flaws in heavy shafts and castings. This will make it invaluable in most of the trades relating to metal shipbuilding, and the light can be so easily modified that the condition of timbers for wooden vessels can be learned.

IF the water through the Sault should not rise above its present stage, the situation would prove very embarrassing for the North West and North Land, whose minimum draft is 14 feet. The engineers at the canal estimate that the water will be, during the season, a fraction of an inch higher than last year, end by June, when the big boats start out, they can undoubtedly get through. All this goes to show, however, that the question of lake levels is rapidly approaching a stage when it will be an immediately vital consideration in lake commerce.

THE struggle over the Detroit bridge bill continues, but every day of delay is a gain for the vessel men, and good authorities say that the bill is dead. It might not be bad policy, after navigation opens, to get an advocate of the bill among the Representatives to learn their official duties long enough to take a trip to some of the principal lake ports, and to the site of the proposed bridge. Figures on paper, no matter how admirably presented, cannot make the impression that is given by the continuous procession of monster carriers up and down this great inland waterway, and the mammoth structures for loading and discharging their many millions of cargo.

DON'T talk hard times. There has so long been cause for grumbling that it has grown to be a habit with most people. Many of these are satisfied with the share of trade they are getting, but they continue to lament over the general business outlook. The situation is steadily improving, and every one agrees that it is bound to improve much faster. Freights should be higher, not alone to offset decreased capacity on account of low water, but also because prices on everything also promise to be restored soon, and the era of prosperity will soon return. True, this is Presidential year, always considered unsettling, but the renewed activity should counteract this to a great extent.

THE FREIGHT SITUATION.

While many owners advise strongly against it, some season contracts for carrying ore will probably be made within a week. It is not at all likely that anything less than $1.10 will be accepted. The outlook for water takes all the gilt off this rate, and if shipping men will hold together closely five cents more may be obtained.

The prices on ore have been fixed at $4 for Bessemer of the Norrie grade, and $3.40 to $3.75 for Mesaba grades, which insures the non-bessemers a price of about $3 per ton. The ore dealers have announced that the output will be limited to 8,000,000 this season, or 2,350,000 less than was brought down last year, but owners of vessel property are skeptical on this point, and it is only reasonable to consider that anything like as good a demand as is anticipated will cause this figure to be swelled considerably. It is altogether probable that unloading charges will be increased at the lower lake docks, and the feeling is general that it is unwise and unnecessary for the boats to accept less than $1.15 from the head of Lake Superior, $1 from Marquette, and 80c from Escanaba, although the actual rates may prove to be 5c less all around.

While the break-up of coal operators at the Ohio and Pittsburg joint meeting seemed to have been upon a misunderstanding so slight that it could have been patched up, there seems to have been no effort in that direction, and the rupture seems to have been purposely precipitated because it was believed that some operators represented at the meeting were acting in bad faith. The operators say there will be no further effort to organize, and there seems little time for such a move before sales are made. The Chicago & Northwestern bids for 60,000 tons of coal deliverable at Green Bay, which sale usually sets the prices each year, have not been opened. The bids, it is stated, are in the neighborhood of $2.20, as compared with $1.92 last year.

Package freight rates are announced as follows: From New York, first-class freight to Chicago, 54 cents per hundred weight; to Duluth, 70 cents; to St. Paul, 84 cents. To New York, from St. Paul, first-class, 84 cents (grain 25 cents); from Duluth, 70 cents (grain 20 cents); from Chicago, 60 cents (grain 17½ cents).

Stocks of grain in Duluth elevators now stand at practically 17,000,000 bushels, of which 13,160,000 bushels is wheat. The increase in stocks here last week was smaller than expected, likewise at Minneapolis. Total increase at both points being 600,000 bushels while expectations were for 800,000 bushels.

Wheat in store here is apportioned among the various terminals elevator lines as follows:

Belt line	1,292,709
Consolidated	4,069,820
Globe	4,354,707
Great Northern	1,046,000
Superior Terminal	1,476,792
Consolidated B	318,489
Consolidated H	96,111
Aggregate	12,654,628
At Minneapolis	19,120,279

FLOTSAM AND JETSAM.

A marine surgeon will probably be appointed soon for Sturgeon Bay.

Another yacht club, known as the "Amateurs," is being formed at Toledo.

The 231 jars at the Alpena fish hatchery are estimated to contain 35,000,000 Whitefish eggs.

The Grummonds will probably have the Atlantic and Flora in commission again this season.

The passenger steamer Arundel will probably ply between Bay City and Alpena this season.

The D. & C. S. N. Co. has spent $40,000 in repairs and improvements on its steamer this winter.

Another large body of magnetic ore has been found near Iron Mountain, Mich., at a depth of 385 feet.

The naval appropriation bill carries with it $31,799,133, of which $12,611,034 is for increase of the Navy.

Representative Thomas, of Michigan, has been assured an appropriation of $5,000 for a steam fog signal at St. Joseph.

At Conneaut work will soon begin on the construction of a new ship 2,000 feet long, to start 2,000 feet from the mouth of the river.

Judge Ricks has dismissed the damage suits of Bucyrus excursionists who were injured at Toledo and who held the owners of the City of Toledo responsible.

Ferdinand Schlesinger has just closed a deal with the Rauchleau Bay Co., of Duluth, for 1,320 acres on Mesaba range, extending from Biwabic to McKinley.

The Huron Dock Co. will undoubtedly secure the desired permission from the government to cut through the east pier in order to construct a new slip 1,000 feet long.

Two Manistique men have taken the level of Lake Michigan at that point each year for the past 13 years. This year they find it 3 feet 8½ inches lower than it was 13 years ago.

The Lake Michigan Car Transportation Co., (W. & M.) want to buy another tug with power about equal to the Crosby, whose compound engine measures 16 and 30 by 24 inches.

The Manistee Transit Co. will operate the Lora daily between Menominee and Manistee, via Sturgeon Bay canal. The Lora will also make a weekly trip to Escanaba and Gladstone.

Capt. James Reid will leave Bay City soon, in order that he may begin work for the Cayuga as soon as the ice leaves the Straits. He is to have 60 per cent. of her appraised value if he succeeds in raising her.

The whaleback steamer Frank Rockfeller has been measured at the American Steel Barge Co's yard, West Superior. Measurement is 2,159.86 tons gross and 2,013.55 tons net, and her official number is 121,015.

The whaleback steamer City of Everett has a six months' contract to carry coal between Puget Sound and San Francisco, with a guarantee that she shall not be delayed longer than four days at each end for loading and discharging.

The steamer Nyack is chartered for five years to run in the Milwaukee and Grand Haven route. The steamer Wisconsin will now be made ready to run in connection with her and the City of Milwaukee will be sold.

The Cleveland-Cliffs Company has started the fires under its charcoal kilns at Gladstone and they will soon be turning out coal for the company's new blast furnace there. It is expected that the furnace will be put into blast very shortly, as nearly exerything is now in readiness to begin active work.

Last Friday afternoon while a heavy windlass was being hoisted into a boat at Davidson's shipyard, West Bay City, the shears used for hoisting broke, letting the windlass fall to the ground. One leg of the shears broke in two, and a heavy piece flew upon the roof of the mill near by, going through the roof. Nobody was hurt.

The Lackawanna Line has chartered the steamer Arthur Orr again for the season. It is negotiating for three steamers from the Red Star Line, the Cuba, Florida and Wyoming, but is hesitating over the price. It is reported that the Western Line will lease the Kearsarge along with the W. H. Gilbert and W. H. Gratwick, which it has run nearly since it came out. The Clover Leaf Line has leased nothing yet except the B. W. Blanchard.

VISIBLE SUPPLY OF GRAIN.

As compiled for THE MARINE RECORD by George F. Stone, Secretary Chicago Board of Trade, March 14, 1896.

CITIES WHERE STORED.	WHEAT. Bushels.	CORN. Bushels.	OATS. Bushels.	RYE. Bushels.	BARLEY Bushels.
Albany	.....	8,000	3,000	.....	.....
Baltimore	116,000	655,000	97,000	88,000	.....
Boston	248,000	42,000	16,000	.....	.....
Buffalo	1,430,000	88,000	27,000	220,000	542,000
" afloat	134,000	.....	163,000	.....	.....
Chicago	18,937,000	5,538,000	1,591,000	418,000	12,000
" afloat	512,000	5,939,000	903,000	.....	.....
Cincinnati	11,000	2,000	20,000	8,000	49,000
Detroit	283,000	10,000	7,000	14,000	10,000
" afloat	.....	.....	.....	.....	.....
Duluth and Superior	12,655,000	134,000	1,033,000	196,000	172,000
" " afloat	512,000	.....	.....	.....	.....
Indianapolis	82,000	32,000	.....	.....	.....
Kansas City	1,252,000	164,000	67,000	26,000	.....
Milwaukee	418,000	2,000	17,000	256,000	41,000
" afloat	176,000	.....	280,000	.....	.....
Minneapolis	19,120,000	55,000	750,000	117,000	297,000
Montreal	893,000	60,000	338,000	3,000	60,000
New York	2,212,000	150,000	1,553,000	34,000	60,000
" afloat	139,000	.....	27,000	.....	31,000
Oswego	.....	.....	.....	.....	36,000
Peoria	23,000	200,000	416,000	8,000	.....
Philadelphia	296,000	261,000	163,000	.....	.....
St. Louis	1,200,000	1,255,000	457,000	3,000	.....
" afloat	.....	154,000	.....	.....	.....
Toledo	669,000	845,000	61,000	127,000	.....
" afloat	.....	.....	.....	.....	.....
Toronto	30,000	.....	87,000	.....	24,000
On Canal	.....	8,000	12,000	.....	.....
On Lakes	.....	.....	.....	.....	.....
On Mississippi	.....	250,000	49,000	.....	.....
Grand Total	61,348,000	15,852,000	8,164,000	1,518,000	1,334,000
Corresponding date 1895	75,773,000	13,396,000	6,352,000	272,000	961,000

SHIP BUILDING AND REPAIRS.

TALK ABOUT THE NEW SHIPS.

Manager A. M. Carpenter of the Jenks Ship Building Co., Port Huron, states that the steamer to be built at the yard on Black River is to be constructed in the best manner of selected wood, and will be even stronger than the previous staunch vessels turned out from this yard. She is 254 feet long over all 240 feet keel, 42 feet beam and 14 feet deep in the hold. The cylinders of her compound engine are 25 and 50 inches in diameter by 40 inches stroke, and her boiler is of the firebox type, 12x13 feet, tested for 125 pounds working pressure.

It is thought that tne H. M. Lond Salt and Lumber Co. will name the new tug which they are building at Port Huron, in honor of Capt. Ed Allum, who has sailed the tug A. Sumner most successfully in the rafting trade for three years past. It is a very appropriate way to show their appreciation of Capt. Allum's valuable services.

The first of the 13 steel barges building at the Crescent shipyard, Elizabeth, N. J., for the Cleveland Steel Canal Boat Co., was launched last Monday. Other launches are expected within a few days.

The third big steel steamer for the Wolvin syndicate, which the Chicago Ship Building Co. is to turn out in the spring of 1897; will be named the Crescent City.

The tug-yacht Edna G. will be launched Saturday afterhoon, April 4 at the Cleveland Ship Building Co.'s yard. The steamer Queen City, building at this yard, will be out about June.

LAUNCH OF THE CITY OF BANGOR.

Knowing the uncertainty of March weather, F. W. Wheeler & Co. took advantage of an auspicious day to launch the big steamship building for the Eddy Bros. the City of Bangor, last Wednesday afternoon. The steamer is named in honor of the old home of her owners, just as their last ship, the Penobscot, was named from the stream on which their birthplace was located. The City of Bangor is almost a counterpart in hull of the L. C. Waldo, which was launched ten days prior at the same yard, having the same keel, but 9 feet more overhang. She is 384 feet over all, 366 feet keel, 44½ feet beam, and 26 feet 7 inches hold. The cylinders of her triple-expansion engines measure 22, 35½ and 59 inches diameter, by 44 inches stroke of piston. Her screw has a diameter of 13½ feet.

The steamer Lagonda, building for Mitchell & Co., of Cleveland, will occupy the place vacated by the City of Bangor. Work on her was already well advanced, as there was room for a part of her next the berth of the Bangor. The next launch at the Wheeler yard will be that of the Whitney steamship, which will occur about two months hence.

GENERAL REPAIR WORK.

PORT HURON.—The Britannic will come out of dock this week repaired in first-class style. Her place will be taken by the barge Montgomery which will receive extensive repairs. The new tug Kittie Haight will be launched in about a week. She will be one of the staunchest tugs ever built at this port.

The steamer Simon Langell is receiving entire new decks and hatch coamings.

The barge William Grandy is receiving new rudder stack, and other minor repairs.

The engines are being taken out of the steamer Mineral Rock. No doubt she will be converted into a tow barge or sold as she is. KENDALL.

BUFFALO.—The new boiler of the steamer Rube Richards will be shipped as soon as the weather is warm enough to test it outside. The Queen of the West is now far advanced in her extensive repair work. Besides the new engine she has a new shaft, which is set about eitht inches higher than the old one was.

MILWAUKEE.—The steamer Maryland finished repairs at the south yard dry-dock Monday morning and was followed by the steamer Indiana, for lining up her stern bearings. The George H. Dyer then entered the dock to have a touch and go damage repaired. A calking gang at work on the R. R. Rhodes. The schooner La Petite was towed to the south yard this week, and will receive new stringers, stanchions and rail.

DETROIT.—The big repair job on the Eddy was completed Monday. The steambarge Gettysburg followed her in the dock and will get a new rudder stock and pintle, besides a general overhauling. The tug Wales is getting some new deck, rail and tow posts.

ALPENA.—Five new spars were placed in the barge Sam Flint last week. The Flint has been dry-docked and recalked, and has been given new deck-beams and deck.

Ship carpenters are at work on the schooner J. B. Kitchen. Her false bottom will be removed, giving her more room in the hold, and repairs will be made where necessary, including calking.

CLEVELAND.—The steamer Hesper is in the Cleveland dry-dock for refastening and recalking. The Rival was also in dock this week for calking.

The Golden Age and Cleveland Dredge Co.'s dredge left the Ship Owners' dock to-day (Thursday) and the J. C. Lockwood goes in for bottom calking and the C. B. Lockwood to stop a leak.

STURGEON BAY.—The work of taking out the big wooden arches in the Fountain City will soon begin. Among other improvements contemplated is the putting in of hog arches to strengthen and straighten out her after body. The Kate Hinchman's contemplated rebuild has not begun and will probably be postponed till next season. Work on the rebuild of the schooner H. C. Winslow is making good progress. Eleven new frames and 11 new plank, from the covering board down are being put in on the starboard bow, and a like number will be put in on the port bow. She will have new quarters, knees, deck, deck-beams, etc.; white pine 3x8 inches will be used for decking. Hog chains will be put in to raise her after body.

REPAIR NOTES.

The steamer Vulcan is getting a new stack at Lorain.

Wheeler & Co.'s shipyard pay roll now numbers 1,200 men.

The schooner J. S. Richards is to receive a new spar, new ceiling, and other work.

Henry Burger, Jr., of Manitowoc, is building two large fish boats—one for Two Rivers people and the other for parties at Clay Banks, Wis.

W. Welter, of Sturgeon Bay, is delivering to Reiboldt & Wolter 400 piles for use in constructing the piers necessary for the manipulation of the floating dry-dock.

REPORTS FROM THE ICE.

Special Correspondence to The Marine Record.

PORT HURON, March 24.

The heavy southwest wind of Saturday had no effect on moving the ice. It blew a gale, but the wind shifted to the north and blew harder than ever. It froze hard last night. The opening will be a late one if the northerly winds continue. Very few boats are fitting out, and no general movement in this direction will be seen before April 1.

KENDALL MARINE REPORTING CO.

Teams can be driven across Georgian Bay, a distance of 50 miles, on ice from one to two feet thick.

Thunder Bay is reported as most clear of ice.

A circular letter from Harvey's Marine Bureau says: "Capt. John Hicks, the dredge contractor, who has just returned from the Encampment, reports the water at that point eight inches lower than at this date last season. The weather continues cold and ice remains solid, making every day. On account of the unusually open winter there will probably be a late opening this spring, the ice in Mud Lake being very thick, more of it having made in March than any other month this year."

The steamers Sterling and Douglas are trying to make short trips out of Toledo.

It is the opinion at Pelee Island that the ice will not go out for at least two weeks.

The Shenango ferry boats Nos. 1 and 2, are together in the ice on the north shore of the peninsula off Erie. They are not aground, as reported, but are awaiting a southerly wind.

Capt. John Nolan, keeper of Gull Rock Light, writes the RECORD as follows: "The ice here at Copper Harbor is 18 inches thick, with no water in sight at present. We had a cold snap here for two weeks. the thermometer being down to 0 and 6° below. The water in the harbor is about one foot lower than last fall.

Capt. Robert Hornbrook, of Evansville, Ind., after a thorough test of superior graphite paint on the canvas roof of the steamer Moran, writes under date of March 19, 1896: "The paint used has given me the best of satisfaction. It stands wear and weather better than anything I have ever used on any of my roofs."

CORRESPONDENCE.

☞We do not hold ourselves responsible in any way for the views or opinions expressed by our correspondents. It is our desire that all sides of any question affecting the interests or welfare of the lake marine should be fairly represented in THE MARINE RECORD.

THE FUTURE OF LAKE PILOTAGE.

To the Editor of The Marine Record:

In your last week's issue appeared an editorial under the heading of "Keep Up with the Procession." Such remarks I think very timely, and should set our older lake pilots to thinking and acting in order to brighten themselves up and become masters of their calling. If not, as you say, the younger men will take their place. The old saying is true, that it is hard to get old dogs to learn new tricks; but their are some exceptions, and if the older men want to be "in it" in a couple of years, they must keep up with the times.

It is not every young man who keeps up with the procession; in fact very few, as a rule, compared with the number of them who are following the lakes; but the greater number of those who have to advance on their merit and have no one to help them, are the ones in whose ranks we find the few who are studying to be masters of their calling.

Not until there is a necessity for a pilot to be master of his business to obtain a license will either old or young make any effort to obtain the necessary knowledge, and that will not occur until the inspection service has examiners who are possessed of the necessary knowledge themselves, which they do not at the present time have, with hardly an exception. So with the blind examining the blind, what is to be expected?

We have one or two examiners on the lakes who are up in their business as regards the rules of the road and the piloting of the lakes; but with the advent of metal boats the technical knowledge a person should be possessed of to sail one successfully is not possessed by any inspector on the whole chain of lakes, that is, if one would judge by examinations they put candidates through, though I know of but one who asks any questions regarding variation or diviation or its application or how to find it. I have a knowledge of whatthe examinations are as conducted by most of our inspectors and I know that no two of the examinations are alike, for how can we expect them to be alike or up to the mark when the inspectors are appointed not because of their ability but because of their political influence.

We have inspectors some of whom never did anything else but run harbor tugs. Are these men competent to examine candidates for pilots to Buffalo or to Ogdensburg or the intervening waters, some of which they have never seen? But such power they have, and it is impossible for them to do their duties properly.

Your paper informs us that there is a bill before Congress to perpetuate such men in office during good behavior. Would it not be better if there was an officer of the Naval or Revenue service attached to the office of the supervising inspector general whose duty it would be to go to each of the different lake ports and get two masters who should be recommended by the Masters' association and two pilots who should be recommended by the Pilots' association, the four to form a board to be presided over by the Naval or Revenue officer from the Supervising Inspector General's office, said board to examine the inspectors and find out if they are competent men, and if found incompetent then to examine aspirants, and place in the positions of inspectors, men on their merit and then will be the time to make their positions permanent during good behavior, instead of making positions permanent regardless of their ability or inability of the occupants.

Then after the inspectors are permanently established let this office see that the examinations are kept up with the times and that the inspectors are also keeping up and also see that all candidates are treated with fairness and equally the same in one place as in another. Let the Naval or Revenue officer who may be attached to the Supervising Inspector General's office and say perhaps three or four times a year to the different inspection offices for say a dozen or so of the written examinations of the different candidates who had been examined by the different local inspectors at the different ports selecting the names haphazard from the reports of those examined sent to headquarters.

Such a system would cause the inspectors to make a fair and sufficiently strict examination so that only a

man who was thoroughly acquainted with his business would get a pilot or master's license and it would cause the inspectors to treat all alike and show if they were asking proper questions and if the answer were correct and if any favors were being shown. So knowing his work was liable to be reviewed and his position dependent upon his ability which would be demonstrated to a large degree by the examination papers called for by the department at Washington which would show that the inspector was keeping up with the times.

Not until some such system is adopted will any of our lake men study their business any more than at present because they don't have to. For if one inspector tries to live somewhat near to what is expected of him the candidates, some of them will jump on a train and go to another inspection district, where the inspector is easier or don't know enough to examine properly to find out if he is a pilot and understands his business or not, and so gives him a license and likely as not one more incompetent man is permitted to go and endanger life and property on the water.

Would it be proper in examining officers for the Navy to have so many different kinds of examination for the same grade of license; as there are principle ports in the United States which is the case in the merchant steamboat inspection service?

AN OLD LAKE MASTER.

Milwaukee, March 22, 1896.

NANTICOKE IS LOCATED.

To the Editor of The Marine Record:

In THE RECORD of March 19th, I notice a letter from "Master Mariner." I am surprised at "Master Mariner" after passing as a scholar and such an expert navigrtor not knowing where the place called Nanticoke is situated. If "Master Mariner" wants to gain knowledge let him ask some small school boy, who will inform him that Nanticoke lies between Port Dover and Selkirk in the county of Holdimance, Province of Ontario. Those in charge of said survey are officers and likewise *gentleman* and were not educated through the neck of a bottle.

In regard to Georgian Bay Survey that the said "Master Mariner" warns sailors to beware of I might inform him that when he, the said Master Mariner, is able to fill the position held by the officers of said survey, he will then be able to dictate and warn sailors of danger, but until then "Master Mariner" should keep mum.

BOATSWAIN.

Goderich, Ont., March 23.

A PAINFUL REMINISCENCE.

To the Editor of The Marine Record:

As "Master Mariner," of Port Huron, wants to know where Nanticoke is on the north shore of Lake Erie, perhaps I can tell him where it was at one time.

In 1868 I chartered with George Herrington, of Buffalo, to go to Nanticoke for a load of wood to Buffalo. My orders were to go 30 miles west of Port Colborne. I went there and was two days finding where to stop. I found some men with teams drawing wood out on some small lighters in the lake and they thought if the weather was right they could put on 15 cords a day. I left there without my load and never heard tell of the place after. W. R. FELLOWS, JR., Light-keeper.

Rond Eau, Ont., March 23.

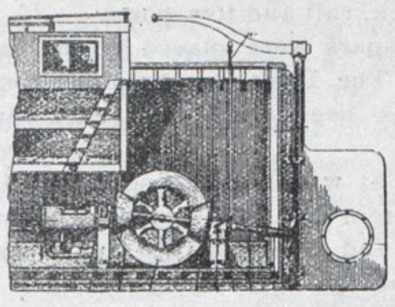
NEW LAKE ONTARIO STEAMBOAT LINE.

A movement is on foot among a number of railroad men and other capitalists of Rochester, N. Y., to establish a first-class steamship line on Lake Ontario. The project of acquiring control of the Bon Voyage and refitting her has been considered, but it will probably be discarded owing to the great expense of remodeling. It is now proposed to purchase or have built a large side-wheeler, and to run her on daily trips to Toronto and semi-weekly trips to the Thousand Islands.

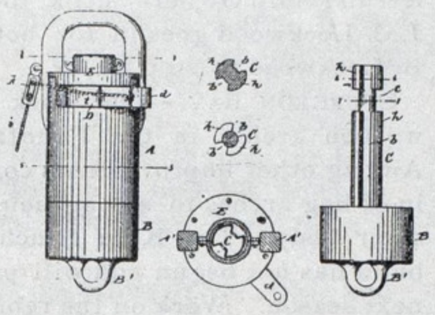
Dunbar & Sullivan's dredge Brian Born started to work at the west end of the Sault canal Tuesday, the 17th. This is the earliest start ever made there, since 1871, when George E. Berner operated a dredge for Williams & Upham all winter.

The steambarge J. M. Allmendinger, which stranded fifteen miles north of Milwaukee and proved a constructive total loss last season, is said to be in good condition.

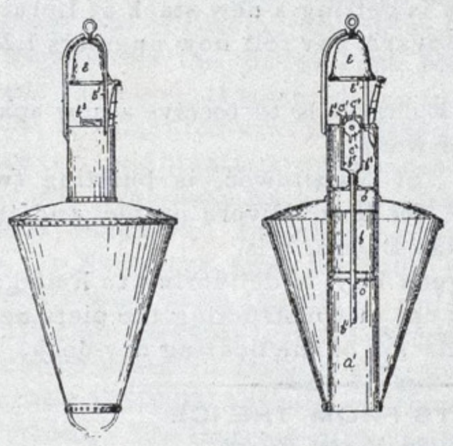
NEW INVENTIONS.



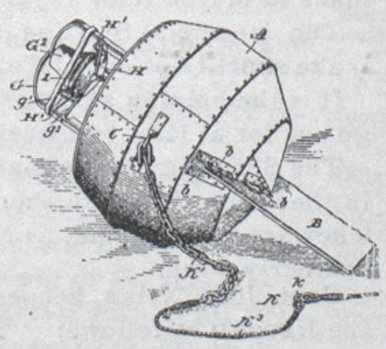
Alonzo G. Mather, of Chicago, has just obtained a patent (No. 457,519) for the application of power to canal boats, for which he made application Jan. 6, 1893. The canal boat has two screws, one on each side of the rudder, and the rudder has in it a hole through which either of the screws can pass when said rudder is folded up against the stern of the boat.



James H. McCarty, Jersey City, N. J., has patented a boat-releasing device (No. 556,103). It consists of two separable sections, one provided with interior ribs, and the other with a grooved and recessed spindle fitting the first-named section, a locking ring with a projecting arm, and having lugs for engaging with the spindle, and means for tripping the spring. The locking ring is provided with concentric channels, and bolts passing through these channels for securing the ring in place and securing its proper movement. The device is provided with a removable cover for protecting the ring and spindle.



Patents for two bell buoys were granted last week. One was to Joseph M. Babbitt, Patrick M. Wood, and John A. Dowd, of New Bedford, Mass. (No. 555,919), the claim being the combination with the buoy, having a vertical tubular opening through its center, of a bell, mounted above said opening; a shaft, mounted transversely in said opening, near its top, having ratchets and projecting arms rigidly secured thereto; a gear wheel, loosely mounted on said shaft and provided with pawls adapted to take into the other of said ratchets, said disk being rigidly secured from turning with said shaft; a bell-crank, pivoted to the top of said tubular opening, having one of its arms within the sweep of the projecting arms on said shaft, and its other arm provided with a hammer adapted to strike the rim of the bell; a spring adapted to impel said hammer against the bell at certain times; a stop, to hold the hammer, normally, from contact with the bell; a shaft supported in guides, and adapted to have a vertical movement in said tubular opening; a rack, adapted to engage with the gear-wheel on shaft *c*, secured to the top of said vertical shaft; a float adapted to move easily in said tubular opening, secured to said vertical shaft and adapted to actuate it, by its flotation.



The other (No. 556,234) was for a bell buoy to be actuated by the current, and was granted to Albert L. Woodworth, Norfolk, Va. The claim is for the combination in a bell buoy, of a float having a blade or pin attached to the bottom thereof so as to extend on each side of the center, the greater area of the blade or pin being on the side to which the moving chain is attached; adjustable counter-balancing weights within said float; a superstructure carrying a fixed bell and a platform; a tube lying practically within said bell, and having an unimpeded passage from end to end, the basin of the central portion of the passage being horizontal and the ends inclined downward; a single ball within the tube, and the springs attached to the platform upon which the tube is mounted, the springs being bent so that their free ends will enter the space between the bell and the tube.

Patent No. 556,088 is for a life-preserver, and was granted to John P. Daly, of Brooklyn, N. Y. It consists of a circular inflatable body provided with a valved air-supply tube and having tapering ends which overlap each other and are held firmly in operative position when inflated.

TRADE AND INDUSTRIAL NOTES.

Chas. S. Rossiter & Co., of Baltimore, are building a set of boats for the United States Revenue steamer Wm. Windom.

S. F. Hodge & Co., Detroit, have orders for two triple-expansion engines of the marine type 13, 21 and 34 by 24 inches, to be connected direct to centrifugal pumps for drainage purposes at New Orleans.

One of the Carnegie Steel Co's. new furnaces will be ready for blast about the middle of May, while the second will be ready about June 1. Furnaces 3 and 4 are now being erected, together with two cast houses, engine and boiler houses.

A good deal of the machinery used in marine work on the lakes goes from the seaboard, but in some lines there are very adequate facilities for manufacture on the lake front and a few lake concerns even extend their sales to the salt water. One of the latter is the firm of Jackson & Church, Saginaw, Mich. Their machinery and friction hoists have acquired a very extensive reputation for excellence.—Marine Journal.

TORONTO, ONT., Jan. 28, 1896.

H. G. TROUT, ESQ., Buffalo.

DEAR SIR: The several wheels we purchased from you for our propellers this season have given entire satisfaction; in fact we are better pleased with your make of wheel than with any we have used hitherto and we have no hesitation in commending them to others.

Yours truly, JOHN WALDIE, President,
Victorin Harbor Lumber Co., Ltd.

THE LIBRARY TABLE:

The RECORD is in receipt of the annual statistical report of the Buffalo Merchant's Exchange for the Year 1895, compiled by William Thurstone, secretary. An addition to a review of the work of the Exchange for the year, it contains in succinct form very valuable figures concerning Buffalo's marine trade, and the general commerce of the Great Lakes. While many of the statements have, naturally, been published heretofore, the collection is most valuable and accessible, and the volume forms a handbook worthy a convenient place in every shipping man's desk.

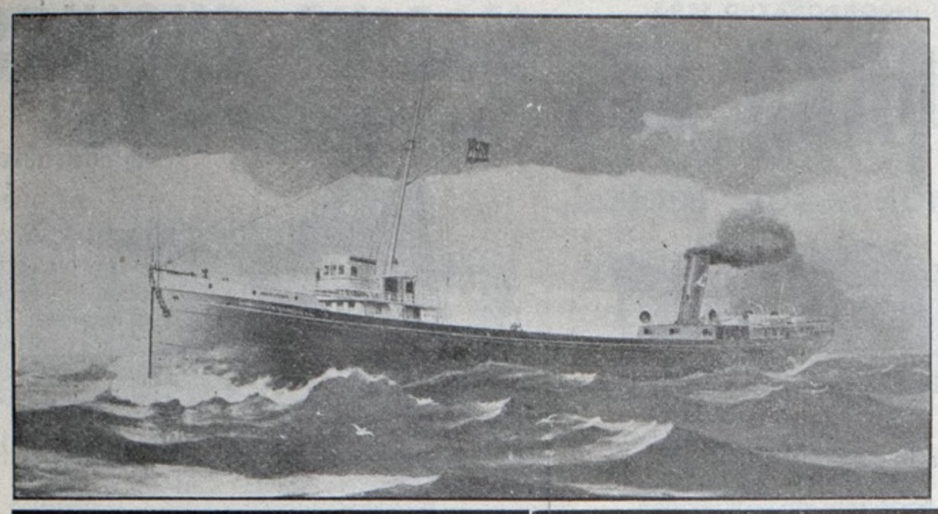
Henry Norman, whose telegrams from Washington to the London Chronicle did so much to modify British opinion in the Venezuelan dispute, contributes to the April Scribner's an article on "The Quarrel of the English speaking peoples." In this article he says: "I regret to say that the impression is growing among some of the most thoughtful people I know, that the United States is determined to pick a quarrel with Great Britain.

A CHANCE TO GO TO SEA.

There are 125 cadetships at the Naval Academy awaiting appointment by members of Congress. These appointments should be made before the examinations in May. All vacancies existing after June 30 next will be filled by the Secretary of the Navy, who is compelled, however, to make his selections from the Congressional district in which the vacancies exist. In addition to these vacancies, the President has at his disposal the appointment of one cadet-at-large. There are already over 100 applications for this appointment, mostly from the sons of army and naval officers, for whom this method offers the only opportunity of entering the Navy, inasmuch as their parents have no claim on any Congressional district.

The Crystal Beach Steamboat Co., of Buffalo, has purchased the side-wheel steamer Garden City (Br.) and will operate her between Buffalo and Crystal Beach, Ont. She carries 1,400 passengers has double boilers, and her speed is eighteen miles per hour.

Capt. A. E. Dow, of Manitowoc, has decided not to sel the schooner Jessie Martin.



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Full supply of BEST STEAM COAL always on hand.
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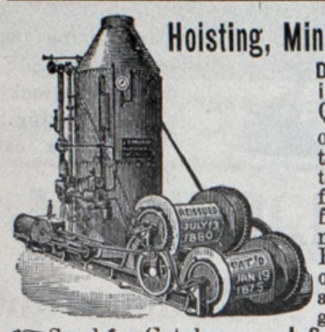
JAMES GRAHAM, DETROIT.



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of any power, sugar cane transferring engines, transferring machines for depositing cane from car to carrier, with my improved Patent Friction Drums, with or without Boilers. Any amount of reference given. Established 1870.

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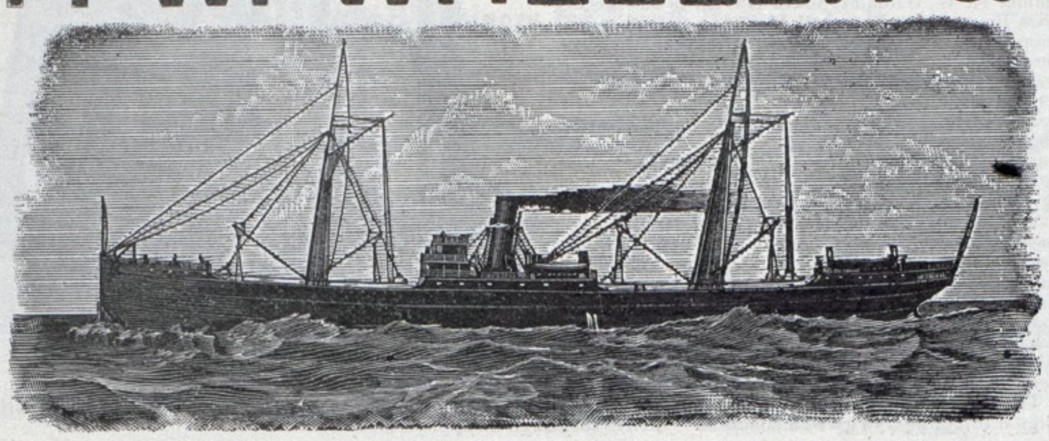

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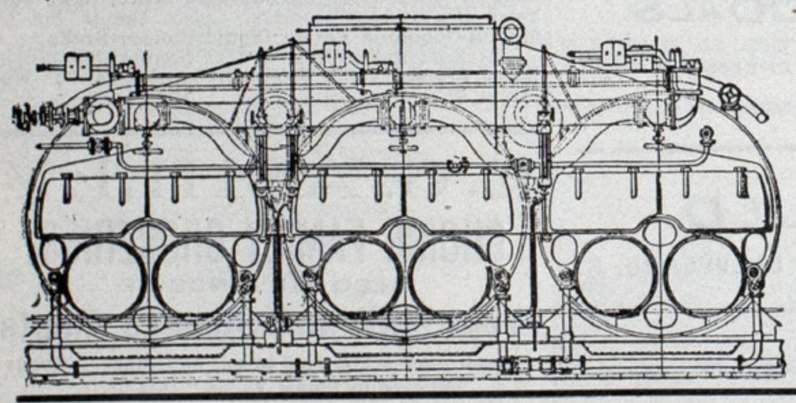
LAKE ERIE BOILER WORKS



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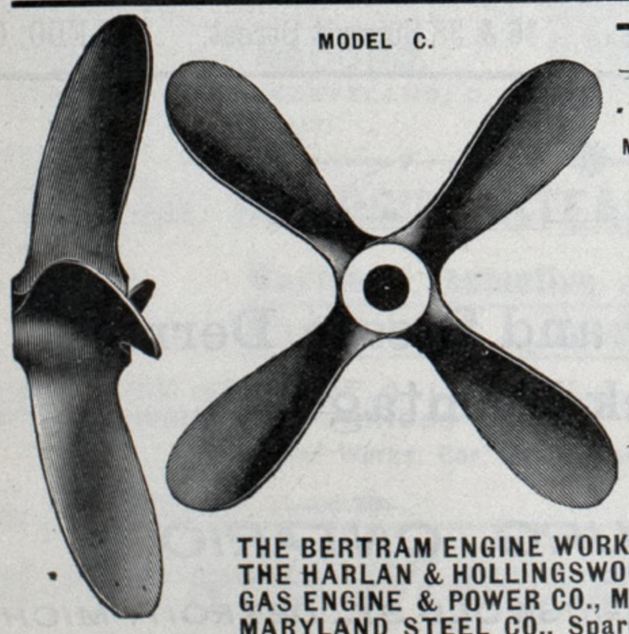

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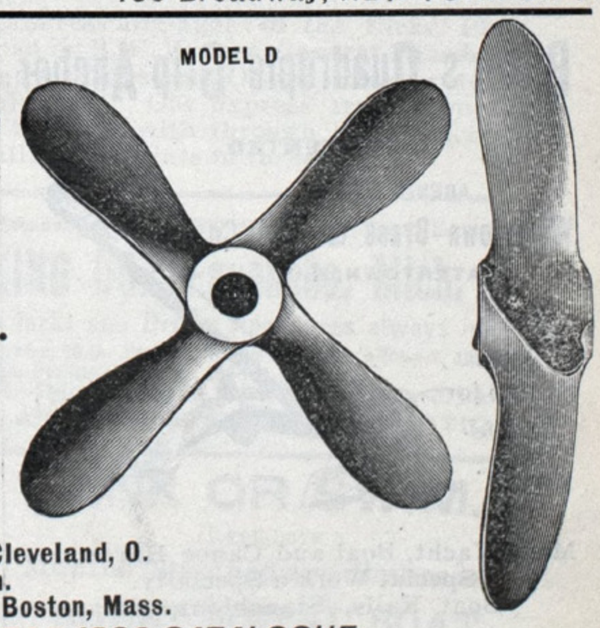

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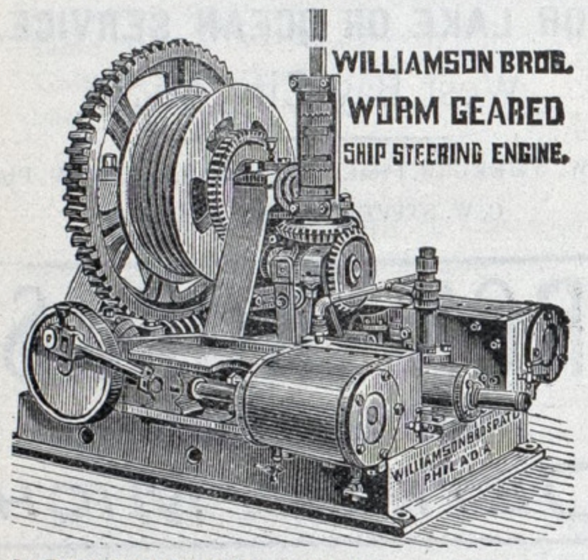

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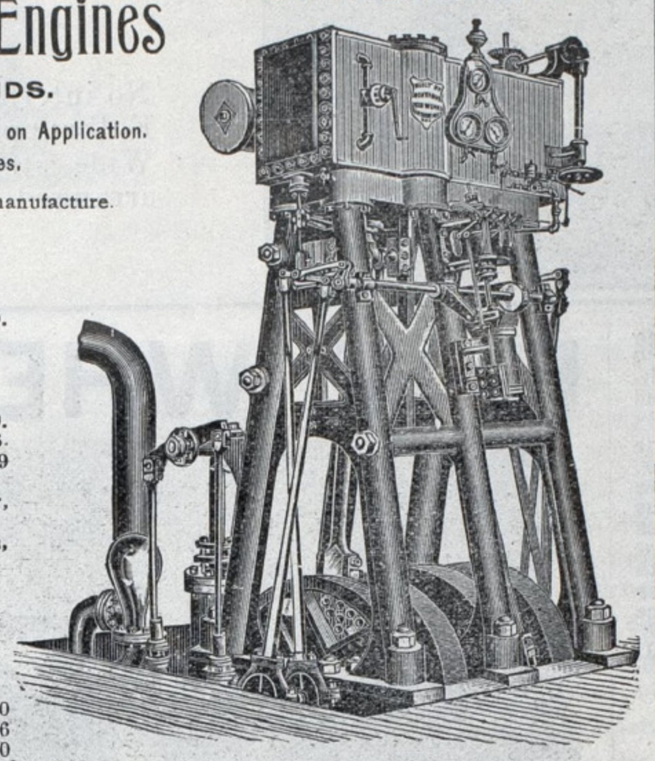

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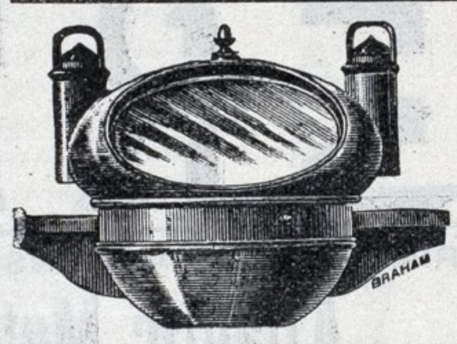

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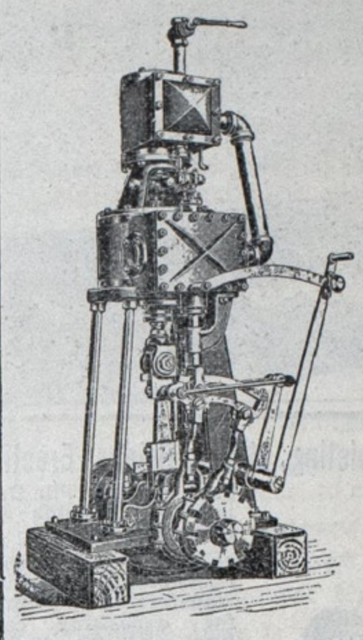

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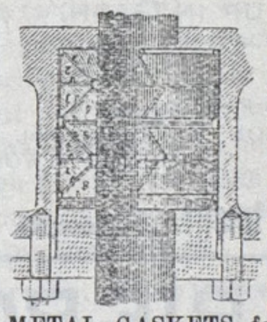

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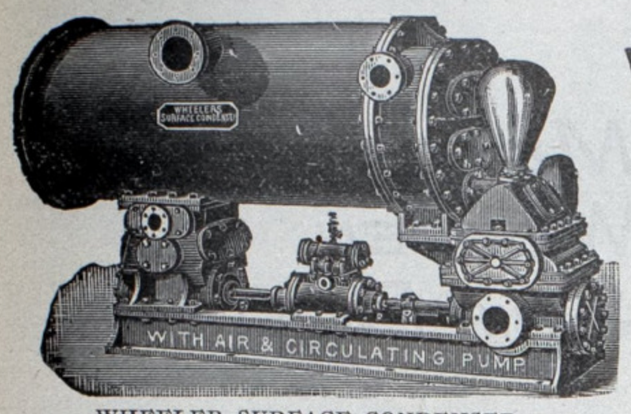

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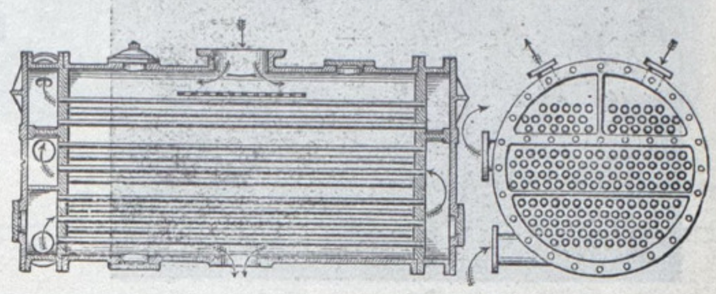

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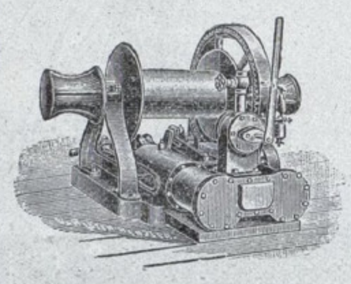

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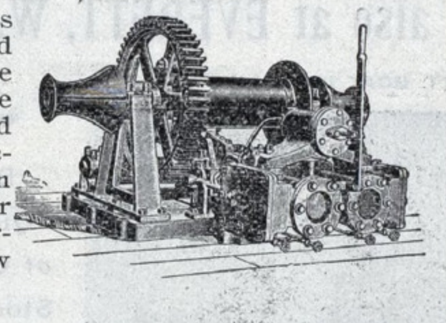

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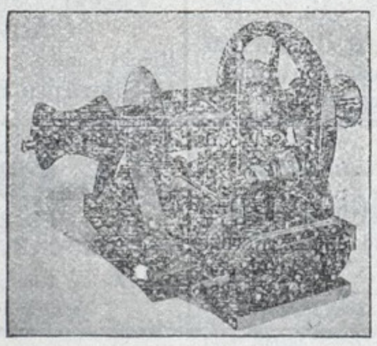

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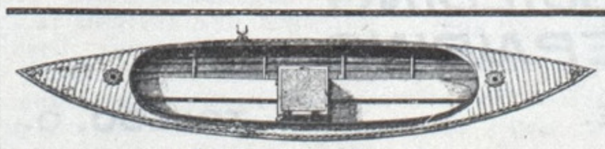

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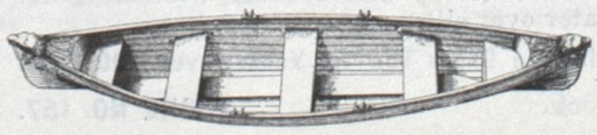

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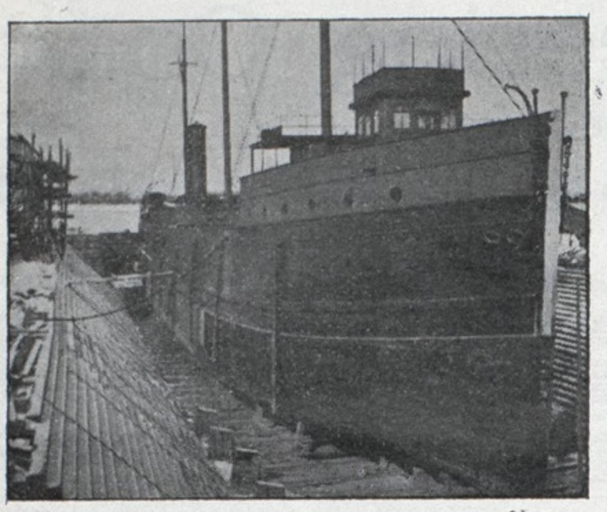

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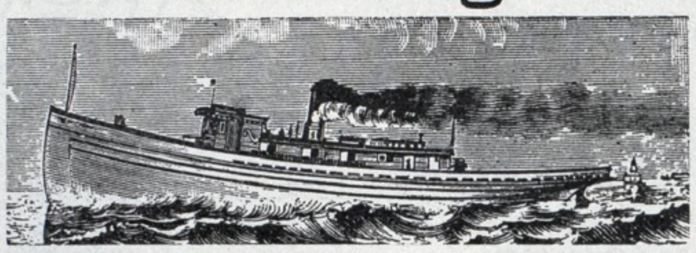

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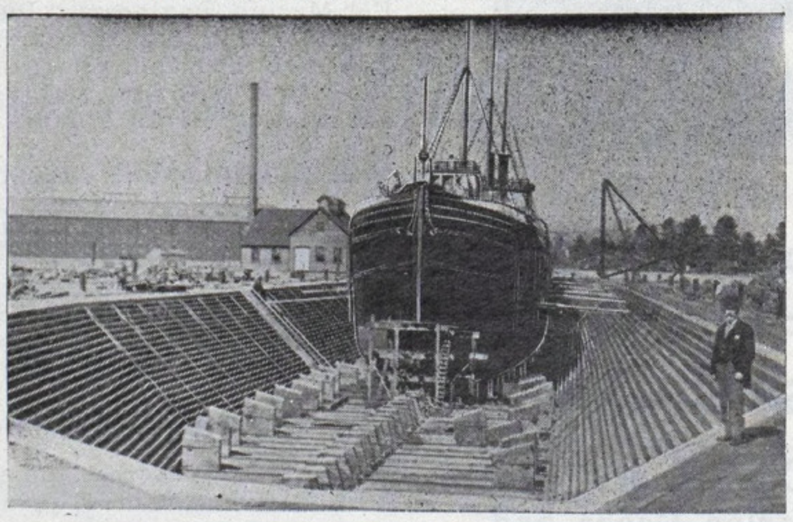

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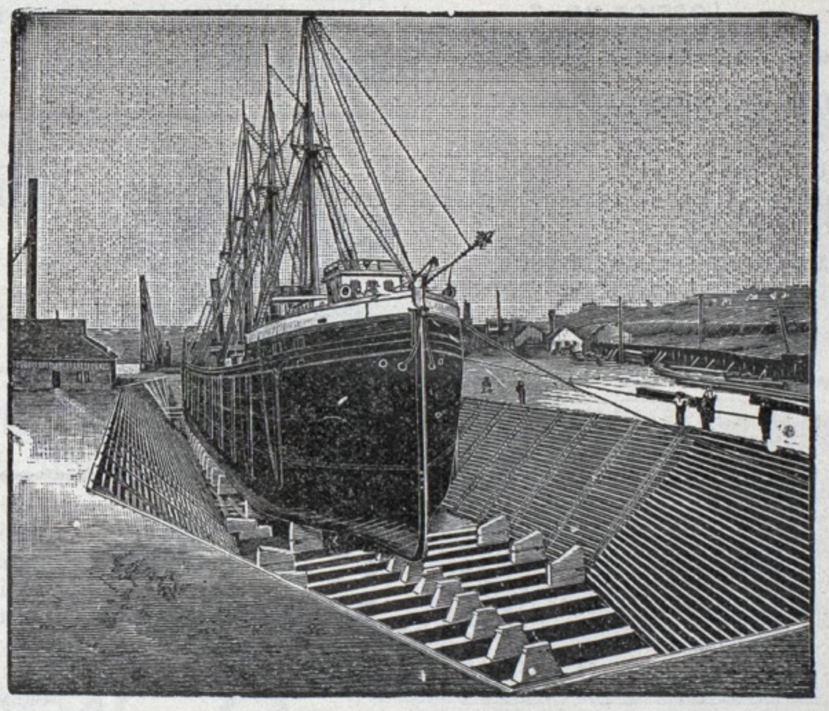

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